

Behavioral and Social Research Program Research Project Grants

Award Mechanisms for Research Project Grants includes the following:

- P01 – Research Program Project
- R01 – Research Project (Traditional)
- R03 – Small Research Grant
- R15 – Academic Research Enhancement Award (AREA)
- R21 – Planning Grant
- R37 – Method to Extend Research in Time (MERIT) Award
- R55 – Shannon Award
- U01 – Cooperative Agreement Research Project Award

BUT THIS FILE ONLY CONTAINS THE R01s

Grant: 5R01AG018854-02
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: ABOWD, JOHN M AB
Title: Demand for Older Workers
Institution: CORNELL UNIVERSITY ITHACA ITHACA, NY
Project Period: 2002/07/01-2005/04/30

DESCRIPTION (provided by applicant): The employment experiences of older workers play a central role in their transition from full-time labor force participants to fully retired individual. There are two sides to these experiences: (1) the decisions of the individuals and their households and (2) the decisions of the employers. The project exploits a recently established social data infrastructure initiative at the United States Census Bureau that permits the analysis, under appropriate confidentiality and privacy protocols, of longitudinal, matched employer-employee data. The research will study the effect on older workers of the dynamic interaction of workers and firms. The project will illustrate the utility of state unemployment insurance records, combined with Census administrative, business and demographic information, in the area of research on aging. The data will provide universal, longitudinal information on both workers and firms on a quarterly basis from 1990-1999. The research will begin with two states: Florida and Maryland, with the expectation of extending the analysis to California. Using unique linked data on firms and their workers the researchers will provide statistical answers to the following questions: (1) what types of firms employ older workers? (2) Does the likelihood of employing older workers vary by industry and firm characteristics? (3) How much persistence and heterogeneity is there in firm workforce composition? (4) How do firms adjust their workforce composition? (5) Who is hiring and firing older workers? (6) How are the earnings outcomes of older workers related to firm characteristics? (7) How does the changing nature of the firm affect older workers? (8) How does the earnings growth of older workers compare with the other workers within a firm hired at the same time? The research will explicitly model the age composition of employment in virtually all the economic entities in the target states. These models will permit the researchers to describe the effects on older workers of the process of adjustment that business undertake when confronted with changes in the demand for their products or the quality of the available workforce.

Grant: 5R01AG016648-05
Program Director: ELIAS, JEFFREY W.
Principal Investigator: ACKERMAN, PHILLIP L PHD
Title: Knowledge Structures and Adult Intellectual Development
Institution: GEORGIA INSTITUTE OF TECHNOLOGY ATLANTA, GA
Project Period: 1998/07/15-2007/02/28

DESCRIPTION (provided by applicant): The long-term objective of the proposed research is to better understand the nature of intellectual development across the adult life span. Rather than concentrating only on process (e.g., working memory, abstract reasoning) or on common cultural knowledge (e.g., vocabulary), this project concerns knowledge structures, that is, what adults know, even though such knowledge may not be universal, or common to a dominant culture. Specifically, this project focuses on delineating the knowledge structures of adults, and demonstrating the relationships between knowledge structures and other critical individual-differences traits, within an integrated framework for adult intellectual development, called PPIK for intelligence-as-Process, Personality, Interests, and intelligence-as-Knowledge. The framework draws on extant measures of intellectual process (and core cultural knowledge), but also draws from other trait domains, including personality, motivation and interests, self-regulatory processes, and self-concept as important determinants of adult intellectual development. The current proposal represents an important expansion of previous research in four areas: (1) Extending the domain knowledge assessment paradigm to an important real-world knowledge domain (specifically, health and wellness knowledge), where evaluation of age, gender and race differences in health and wellness knowledge and their ability, personality, motivation, etc. correlates will be used to help identify at-risk individuals and groups. (2) Identifying age/cohort differences in knowledge, and the trait determinants of knowledge (across 19 different domains, including science/technology, civics, humanities, business, and current-events, and health/wellness knowledge) across a range of 16 to 75 years of age using a cross-sectional paradigm; (3) Examination of the role of ability, personality, interest, and baseline knowledge determinants of individual differences in short-term domain-specific learning; and (4) Examination of ability, personality, interest, and baseline knowledge determinants of individual differences in self-regulated domain-knowledge learning. This research will yield data that are relevant to a reexamination of the nature of adult intellect -- in a way that will provide a better metric to understanding the intellectual capabilities and limitations of adults at various chronological ages. The research will also help identify the predictors of individual differences in knowledge across a variety of different domains, but especially in the area of health and wellness, by focusing on trait complexes (groups of correlated traits) that support or impede acquisition of knowledge within and between domains.

Grant: 5R01AG017973-03
Program Director: STAHL, SIDNEY M.
Principal Investigator: ADLER, SHELLEY R PHD
Title: OLDER PATIENT-PHYSICIAN-ALTERNATIVE HEALER RELATIONSHIPS
Institution: UNIVERSITY OF CALIFORNIA SAN FRANCISCO SAN FRANCISCO, CA
Project Period: 2001/09/01-2005/05/31

Older patients are increasingly likely to be under the care of both physicians and alternative practitioners, often for treatment of the same condition. In the vast majority of cases, however, alternative care is not integrated with biomedical care; indeed, most patients do not inform their physicians of their concurrent use of complementary and alternative medicine (CAM). This is a critical juncture at which to study health-care relationships in which the patient is treated by practitioners from different medical systems who are usually not in contact with, and often not aware of, one another. The objective of this four-year qualitative, anthropological study is to describe and examine the ways in which emerging health-care relationship configurations are approached and understood by older women diagnosed with breast cancer, their physicians, and their CAM practitioners. This will be an ethnographic investigation of the mediating effects of individuals' age, ethnocultural background, and expectations of aging, based on the collection of data through in-depth individual interviews. The 150 study participants will be comprised of linked triads of women with breast cancer, ages 55- 84, who use biomedicine and CAM; their main physicians; and their main CAM practitioners. The patients will include African-, Chinese-, European-, and Hispanic American women. The project will (1) investigate the health beliefs and healing strategies involved in older breast cancer patients' seeking care concurrently from physicians and CAM practitioners; (2) examine patient participants' understandings of and reactions to their relationships with physicians and CAM practitioners; and (3) examine physicians' and CAM practitioners' understandings of and reactions to their relationships with older breast cancer patients. This study will reveal older breast cancer patients' integrative healing approaches, elucidate benefits and deficiencies of biomedical and CAM systems with regard to addressing older breast cancer patients' needs, and suggest future strategies for strengthening emerging health-care relationships.

Grant: 5R01AG018234-03
Program Director: ELIAS, JEFFREY W.
Principal Investigator: ALBERT, STEVEN M PHD
Title: COGNITIVE AND PHYSICAL BASIS OF DISABLEMENT
Institution: COLUMBIA UNIVERSITY HEALTH SCIENCES NEW YORK, NY
Project Period: 2001/03/01-2006/02/28

This research will test a causal model of "disablement," in which impairment (low scores on tests of motor or cognitive performance) and functional limitation (inefficient or unsafe performance of daily tasks) result in disability (recognition of difficulty or need for help in instrumental and basic activities of daily living [IADL/BADL]). We will follow 360 elders recruited from an existing multi-ethnic community-based study, the Washington Heights-Inwood Columbia Aging Project (WHICAP), all of whom will have mild-to-moderate disability and not meet criteria for dementia. They will be assessed 3 times, 18 months apart. Within disability groups (1, 2, or 3 domains based on self-reports), half of the subjects will be cognitively normal and half will have mild cognitive impairment or questionable dementia. We will assess the direct and indirect effects of impairment and functional limitation on disability in groups defined by self-reported disability status and cognitive performance, in different race-ethnic groups (African-American, Hispanic, white), and longitudinally. In addition, we will assess the accuracy of self- and proxy-reports of disability using a clinical diagnosis (established in a clinical consensus conference) as a gold standard, and alternatively through use of latent class models that do not assume a gold standard. An important feature of this research is its use of the assessment of Motor and Process Skills (AMPS), an occupational assessment tool for rating functional limitation in the activities of daily living. AMPS evaluations yield scores for motor and cognitive/process limitations that interfere with efficient and safe performance of IADL/BADL tasks. OT's will conduct AMPS evaluations in subject homes, along with detailed assessments of physical impairment (as well as measures of home and neighborhood environment). The parent WHICAP study will provide data on cognitive performance and neurologic-medical status. Our major goal is to test a causal (structural equations) model of disablement. We hypothesize that impairment is related to disability directly but also indirectly through observed motor and cognitive/process limitations. We will test whether this indirect effect is stronger for some groups of elders (e.g., mild disabled) than others. This finding would suggest that disability may be reduced through remediation of motor and cognitive/process skills, as well as by efforts to reduce impairment.

Grant: 2R01AG015062-06
Program Director: STAHL, SIDNEY M.
Principal Investigator: ALLMAN, RICHARD M MD
Title: Mobility Among Older African Americans and Whites
Institution: UNIVERSITY OF ALABAMA AT BIRMINGHAM BIRMINGHAM, AL
Project Period: 1998/09/30-2008/07/31

DESCRIPTION: (provided by applicant) The hypotheses underlying the proposed research are that potentially modifiable factors predict mobility (life-space) trajectories associated with aging among community-dwelling African Americans (AAs) and whites. Moreover, there are racial differences in these trajectories and in risk factors for life-space changes. The research team proposes to continue a prospective, observational study of a population-based sample of 1000 community-dwelling older adults (251 African American (AA) males, 249 AA females, 250 white males and 250 white females; 54 percent rural) for a total of 7 years of follow-up. New specific aims include: (1) Assess the predictors of life-space trajectories; (2) Identify predictors of transitions to restricted life-space, homebound status, and nursing home placement; (3) Examine proximate causes of life-space transitions; (4) Evaluate changes in hypothesized risk factors as predictors of life-space trajectories; (5) Determine the relationship of nutritional status with subsequent life-space trajectories; (6) Evaluate specific markers of inflammation as potential predictors of life-space. Repeat in-home assessments (N=780) 48-months after the baseline (1999-2001) in-home assessment will permit documentation of changes in disease and geriatric syndrome status, neuropsychological factors, nutritional status, health behaviors, and medication use since baseline. Fasting blood specimens (N=662) will be obtained within one month of the 48-month in-home assessment to assess nutrition-related lab tests, measures of inflammation, and other lab tests reflecting disease severity or management. Three 24-hour recall dietary intakes also will be obtained within 3 weeks of the in-home assessment. Telephone follow-up interviews every 6 months will be used to ascertain subsequent life-space. Multivariable, hierarchical mixed model growth curve analyses and generalized estimating equation (GEE) approaches will be used for analyses to permit identification of predictors of life-space trajectories and of specific life-space transitions. The results of this research will lead to interventions that will foster independence of older AAs and whites.

Grant: 1R01AG020673-01A1
Program Director: SHRESTHA, LAURA B.
Principal Investigator: ALWIN, DUANE PHD
Title: Aging and the Reliability of Survey Data
Institution: PENNSYLVANIA STATE UNIVERSITY-UNIV UNIVERSITY PARK, PA
PARK
Project Period: 2003/02/15-2006/01/31

DESCRIPTION (provided by applicant): This research investigates the relationship of age to measurement errors in survey-administered self-report questionnaires. The focus of the research is on the survey interview as a method of gathering social data, and the extent to which measurement errors assessed in such interviews vary as a function of the respondent's age. The overall aims of this project are to better understand the nature of survey measurement errors and the processes by which they are generated, and to make practical recommendations about the characteristics of survey questions that will improve the quality of data in surveys of the aging population. To accomplish these goals the research conducts a systematic analysis of the reliability of responses to survey questions using several nationally representative panel data sets. First, we build upon our prior NSF-supported research using three surveys from the National Election Study (NES) series -- the 1956-58-60, 1972-74-76, and 1992-94-96 panel studies of the American electorate, and a fourth panel survey, the 1986-89-94 Americans' Changing Lives (ACL) study of health and well-being, to examine reliability by age, controlling for education. Second, we investigate these issues using two innovative panel surveys of middle-aged and older adults: the original Health & Retirement Study (HRS) panel study of preretirement men and women aged 51-61 assessed in 1992 (n=9,824), and reinterviewed in 1994, 1996, 1998 and 2000, and the parallel study of Asset and Health Dynamics (AHEAD) which interviewed adults aged 70 and above in 1993, and reinterviewed them in 1995, 1998 and 2000 (n=7,447). The younger HRS (birth cohorts of 1931-41) and older AHEAD (birth cohorts of 1923 and before) respondents were asked many of the same questions, permitting the comparison of measurement errors across groups. Age-specific levels of reliability will be estimated for approximately 1,000 survey questions using a variety of state-of-the-art estimation strategies. Two basic approaches will be employed in the estimation of reliability- first the SEM-based maximum-likelihood approach for situations where it makes sense to assume continuous unobserved latent variables, and second the "latent transition" models that are appropriate where the unobserved latent variables are latent classes. Within the SEM approach the research will employ several different estimation strategies depending on the scale assumptions appropriate to the observed data, including standard Pearson-based covariance approaches for continuous variables, tetrachoric correlations for dichotomous variables and polychoric-based asymptotic covariance approach with weighted least squares estimation for ordinal variables. A major focus of the analysis is on age-related differences in the impact of the formal properties of survey questions (e.g., question content, length of question text, number and complexity of response options, and the provision of explicit "Don't Know" response options) on reliability. Assembling information on reliability from these data sources can help improve knowledge about the strengths and weaknesses of survey data. It is expected that the results of this research will be relevant to the general task of uncovering the sources of age-related measurement errors in surveys and the improvement of methods of survey data collection across the life span through the application of this knowledge.

Grant: 5R01AG021203-02
Program Director: ELIAS, JEFFREY W.
Principal Investigator: ALWIN, DUANE MA
Title: Latent Growth Curve Models of Cognitive Aging
Institution: PENNSYLVANIA STATE UNIVERSITY-UNIV UNIVERSITY PARK, PA
PARK
Project Period: 2002/09/30-2005/07/31

DESCRIPTION (provided by applicant): This research applies strategies of latent growth curve (LGC) modeling with a structural equation framework to examine intra-individual change in trajectories of cognitive performance in old age and its correlates, particularly age, education, health, and physical and sensory functioning. The proposed work focuses explicitly on the following objectives: to confirm patterns of decline with age across a broad spectrum of mental abilities using both crosssectional and longitudinal assessments of cognitive performance in nationally representative samples of the older population; to ascertain the extent to which cross-sectional age-differences in cognitive functioning are spuriously due to cohort-related factors, such as level of schooling, or other age-related phenomena, e.g., comorbidity and sensory functioning; to assess the age-related intra-individual trajectories of several measures of cognitive functioning as well as age-linked covariates such as comorbidity, other social and physical functioning, and sensory functioning using longitudinal data over periods of time of up to seven years; to assess the extent to which age-related declines in sensory impairment and health explain the link between aging and cognitive functioning in middle-aged and older adults, net of education and comorbidity; and to assess how patterns of cognitive decline and its covariates differ by sex and race/ethnicity in older adults. We investigate these issues using two innovative nationally-representative panel surveys of middle-aged and older adults: the original HRS (Health and Retirement Study) national panel study of preretirement men and women aged 51-61 assessed in 1992 (n=9,824) and reinterviewed in 1994, 1996, 1998 and 2000, and the parallel AHEAD (Study of Asset and Health Dynamics Among the Oldest Old) national panel study which interviewed adults aged 70 and above in 1993 (n=7,443) and reinterviewed in 1995, 1998 and 2000. The key elements of our design allow us to: (1) generalize to a national population of middle-aged and older individuals sampled using probability methods; (2) assess differences between birth cohorts in the processes studied; (3) assess occasion-based age changes in the population to estimate the nature and shape of intra-individual change; (4) assess inter-individual and inter-cohort differences in intra-individual change; (5) build synthetic cohort models of accelerated age-based change using the multiple cohort feature of the panel design; (6) assess the effects of fixed covariates and appropriately lagged timevarying covariates on individual differences in age-related change; and (7) assess the extent of bias in these aging functions introduced by problems of sample attrition and/or mortality.

Grant: 1R01AG022537-01
Program Director: STAHL, SIDNEY M.
Principal Investigator: ANESHENSEL, CAROL S PHD
Title: Neighborhood SES and Emotional Distress in Old Age
Institution: UNIVERSITY OF CALIFORNIA LOS ANGELES LOS ANGELES, CA
Project Period: 2003/09/30-2006/08/31

DESCRIPTION (provided by applicant): The proposed study investigates the contextual effects of neighborhood socioeconomic status (SES) on the health and well being of older adults. There are four specific aims, to: (1) examine the extent to which the emotional well being of older persons differs, on average, among neighborhoods, and the extent to which these differences are the result of parallel differences in the characteristics of the people who live in these neighborhoods; (2) compare structural and ecological models for multilevel-SES effects on emotional distress among the aged, specifically testing cross-level interactions that operationalize the concept of person-environment fit; (3) explore the extent to which models developed for the impact of SES on emotional distress apply more generally to other aspects of health that are especially relevant to older persons, specifically cognitive impairment and physical illness; and, (4) use the passage of time to sort out, at least in part, the nature of the connections among emotional distress, cognitive impairment, and physical illness, and their joint dependence upon SES among older adults. The proposed study uses existing data from the Asset and Health Dynamics Among Older Adults (AHEAD) study. AHEAD is a longitudinal survey of a nationally representative sample (N = 8,222) of adults aged 70 years and older in 1993, with follow-up data available for 1995 and 1998. This large, representative, and diverse sample means that results have excellent external validity. In addition, 1990 Census data is used to operationalize neighborhood using tract-level data. Census data will be merged with the AHEAD individual-level survey data using geocodes from restricted access cross-reference files. The resultant multilevel data set will contain information on individuals nested within tracts, along with information about how these tracts differ from one another along sociocultural (e.g., ethnic composition), economic (e.g., percent below poverty line), demographic (e.g., percent over age 65), and physical (e.g., percent vacant housing units) dimensions. The primary method of analysis is hierarchical linear regression. The multilevel analysis first estimates the magnitude of between-neighborhood variation in emotional distress, and the extent to which this variation persists net of differences in the social status of the people who live in these different neighborhoods. This residual between-neighborhood variation is then used to test structural and ecological models for the impact of neighborhood-SES, specifically testing the hypothesis that the impact of individual-level SES is conditional upon the SES of one's neighbors.

Grant: 5R01AG019803-02

Program Director: ELIAS, JEFFREY W.

Principal Investigator: BAHRICK, HARRY P

PHD GEN/EXP
PSYCH:LEARNING AND
MEMORY

Title: Cognitive Aging and Access to Knowledge

Institution: OHIO WESLEYAN UNIVERSITY

DELAWARE, OH

Project Period: 2002/05/01-2007/04/30

The objectives are to investigate age-related changes in access to long- standing knowledge and to establish the effect of cognitive aging on the half-life of interventions designed to stabilize access to knowledge. The research will yield normal information about the impact of cognitive aging on accessing available semantic memory content and on the effectiveness of interventions that re-establish access. The findings will differentiate normal from pathological cognitive again impairment. A further purpose is to extend current theories of cognitive aging so as to accommodate age-related changes of memory functioning that are largely independent of processing speed and of processing capacity. Participants in three age groups will be tested for recall and recognition of foreign language vocabulary acquired in school. The difficulty/frequency level of words assigned to the recall and recognition tests will be equated. The data will be subjected to multiple regression analyses. An evaluation of regression will yield predictions of recall access to vocabulary as a function of the age of the individual, the available vocabulary, the level of original knowledge, rehearsals of that knowledge, the retention interval, processing speed, and performance on acquisition of new vocabulary and the interactions among these variables. The half-life of corrective and of preventive maintenance interventions that re-establish or stabilize access to marginal memory targets will be evaluated as a function of the type of target (e.g., nouns, verbs, specific names), the age of the individual, and other individual difference variables and their interactions. The results will yield age-related guidelines regarding effective strategies for stabilizing access to available knowledge, and the results will be related to current theories of cognitive aging.

Grant: 5R01AG017456-04
Program Director: ELIAS, JEFFREY W.
Principal Investigator: BAYEN, UTE J PHD
Title: ADULT AGE DIFFERENCES IN RECOGNITION MEMORY
Institution: UNIVERSITY OF NORTH CAROLINA CHAPEL CHAPEL HILL, NC
HILL
Project Period: 2000/02/01-2005/01/31

DESCRIPTION: Normal older adults have, in comparison to young adults, difficulties in memory tasks that require the acquisition and retrieval of new information. This proposal offers an explanation for these difficulties by drawing on a formal theory of recognition memory. It is proposed that older adults are less able than young adults to integrate to-be-remembered information with the context in which it occurs. This theory will be tested in a series of thirteen recognition memory experiments with healthy young and older adults. In a recognition task, participants study a list of items and are later asked which items from a test list appeared on the study list. In the proposed computer-directed experiments, young and older adults will study words in various visual contexts and will be tested in both the same and different contexts. A context effect occurs if memory performance is higher in same-context than different-context test conditions. Predictions regarding context effects are formally derived from a general global matching theory of recognition memory. Different patterns of context effects are expected depending on whether item and context information are processed in an integrative or a non-integrative fashion. The proposed experiments are designed to establish that older adults process contextual information in a non-integrative manner, and have difficulties integrating context with to-be-remembered items. They will further investigate if older adults' difficulties in contextual integration can be accounted for by limitations in general processing resources, and if older adults can overcome their integration deficit with deliberate efforts to integrate information with its context, or by drawing on prior semantic knowledge. A further objective is to investigate if the contextual integration theory can be expanded to a more general information-integration theory that states that older adults have difficulties integrating information in general, whether this concerns the integration of item and context information or inter-item integration of information.

Grant: 5R01AG019295-03
Program Director: STAHL, SIDNEY M.
Principal Investigator: BECKER, GAYLENE PHD
Title: Age, Ethnicity, and the Chronically Ill Unisured
Institution: UNIVERSITY OF CALIFORNIA SAN FRANCISCO SAN FRANCISCO, CA
Project Period: 2001/07/01-2005/06/30

The overall aim of this qualitative, anthropological research is to explore how chronically ill people in three ethnic minority groups who are uninsured attempt to manage their illnesses, with emphasis on the roles that age and ethnicity play. Four interrelated domains are explored: 1) access to and utilization of health care resources, both formal and informal, including the effect of economic status and financial resources on illness management; 2) interpretations of illness, including use of biomedicine and other systems of medical belief and practice; 3) cultural beliefs about age and illness; and 4) participation of family and friends in illness management. Focusing on these domains enables us to examine illness experience and bodily distress within its social, cultural, and economic context, and thus to pinpoint social, cultural, and economic differences within and between groups. We will examine the full range of this experience by studying 180 individuals, 60 in each of the following groups: African American, Latinos, and Filipino Americans. A subset of 20 from each group will be interviewed longitudinally, with 3 interviews at 6-month intervals. Qualitative analysis will be undertaken in a systematic progression of steps and will be supported by quantitative analysis of health measurement data, measures, and qualitatively-derived data.

Grant: 3R01AG007977-20S1
Program Director: ELIAS, JEFFREY
Principal Investigator: BENGTON, VERN L PHD PSYCH ASPECT:SOC
PSYCH/ASPECTS-UNSPEC
Title: LONGITUDINAL STUDY OF GENERATIONS AND MENTAL HEALTH
Institution: UNIVERSITY OF SOUTHERN CALIFORNIA LOS ANGELES, CA
Project Period: 1998/08/01-2004/11/30

DESCRIPTION: The goal of this research is to investigate effects of recent socio-historical change of the interactions and aging of successive family generations. The research has two general objectives: (1) to explore how the structure, functions, and consequence of intergenerational relationships may have changed across recent decades, in response to macro-social trends in population aging, female labor force participation, family formation and dissolution, occupational mobility and corporate downsizing, and values related to familism; and (2) to examine how intergenerational relationships influence well being in the context of life-course transitions from early to middle to late adulthood. This research will extend the Longitudinal study of Generations, which began collecting data in 1971 on over 200 adult members of three- (and later four-) generation families. By continuing the three-year collection of data through the years 2000 and 2003, we can realize the first fully elaborated generation-sequential design--comparing sets of parents and adult-children at the same age across different historical periods. Collection of two additional waves of data will allow investigation of four specific aims: (1) To chart the effects of socio-historical change on families, intergenerational relationships, and individual life-course development during the past three decades; (2) To track life-course trajectories of family intergenerational solidarity and conflict over three decades of adulthood, and across successive generations of family members; (3) To identify how intergenerational solidarity and conflict influence the well- being of family members throughout the adult life-course and across successive generations; (4) o examine women's roles and relationships in multi-generational families across 32 years of rapid change in the social trajectories of women's lives. This study will extend our understanding of the relationship between social change, family functioning, and individual well-being over the adult life.

Grant: 5R01AG018369-03
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: BERKMAN, LISA F BA
Title: Neighborhood Effects on Health and Functioning of Elders
Institution: HARVARD UNIVERSITY (SCH OF PUBLIC HLTH) BOSTON, MA
Project Period: 2001/09/01-2004/08/31

The objective of this research is to understand the ways in which neighborhoods influence trajectories of physical and cognitive functioning and health of older men and women. Although much is known about the impact of social conditions and behaviors on the health and well-being of the elderly, less is understood about the residential environments which help to shape those conditions and behaviors. We test a model in which specific characteristics of neighborhoods or communities in which an older person lives can either enable the maintenance of functioning and independent living and serve to promote successful aging or may prove to be deleterious for health and functioning. This project is based on longitudinal data from the New Haven and Duke EPESE (Established Populations for the Epidemiologic Study of the Elderly) a cohort studies. The New Haven EPESE is a study of 2812 men and women 65 and older living in New Haven in 1982 and under continuous surveillance through 1994. The Duke EPESE is a study of 4,162 men and women living in the Piedmont, 5 county region of North Carolina, interviewed in 1986 and followed through 1996. We propose to merge data from these cohorts with ecological-level data from multiple sources including the census, government documents and historical information from the New Haven Regional Data Cooperative. The specific aims of the study are: A) to refine an innovative conceptual model and set of measures of neighborhood characteristics. Our proposed model is 1) multidimensional spanning social and economic conditions to service-related and physical characteristics and is 2) germane to the study of the elderly. B. to examine the influence of neighborhood conditions on five primary health outcomes using multilevel modeling incorporating both ecological and individual level variables. The five outcomes are: 1) physical functioning, 2) cognitive functioning, 3) mortality, 4) self-rated health and 5) nursing home admissions. C) to identify behavioral (e.g. alcohol and tobacco consumption physical activity) and psychosocial (e.g. social networks, fear of crime, social engagement) pathways through which neighborhood characteristics affect health and functioning. D) to identify particular subgroups of older men and women who may be particularly vulnerable to the effects of neighborhood conditions. We hypothesize that frail and economically disadvantaged older men and women may be at particularly high risk.

Grant: 1R01AG023399-01
Program Director: ELIAS, JEFFREY W.
Principal Investigator: BERKMAN, LISA F PHD
Title: Causal Effects of Education on Elder Cognitive Decline
Institution: HARVARD UNIVERSITY (SCH OF PUBLIC HLTH) BOSTON, MA
Project Period: 2003/09/30-2006/08/31

DESCRIPTION (provided by applicant): We propose to examine the relationship between education and cognitive decline and mortality in old age using longitudinal data from the Health and Retirement Survey (HRS). Although the correlation between education and cognitive decline is well-documented, it is not known if this relationship is causal or due to confounding by individual characteristics such as cognitive ability or family economic status. Furthermore, if we assume this relationship is causal, the key mediators are unknown. We emphasize the importance of innovative analytic approaches in estimating the overall causal effect and in testing specific pathways. Our primary aims are: 1) to derive consistent estimates of the causal effect of education on cognitive change and mortality using instrumental variables analysis; 2) to test whether the effect of education on cognitive outcomes operates through a latency, social trajectory, or cumulative harm model; and 3) to provide unbiased estimates of the importance of three hypothesized pathways linking education and cognitive decline, using new analytic approaches emphasizing the time-varying nature of both mediators and confounders. These hypothesized pathways are: social ties, health behaviors, and cardiovascular health. Rapid changes in state educational policies influenced the educational attainment of birth cohorts in the first half of the 20 th century. Using such natural experiments, instrumental variables analyses can provide estimates of health effects of education, even when important confounders are unmeasured. State policy data on instruments such as compulsory schooling and term length, will be linked to individual level data from the Health and Retirement Survey (HRS). As of the 2002 interview wave, the combined HRS sample included 1 to 5 waves of memory and mental status assessments on over 25,000 participants. We will use innovative methods to test specific pathways while accounting for time-varying covariates. HRS contains detailed information on lifecourse socioeconomic position, including 40 years of Social Security earnings information on over 9,000 original sample members, and physical and behavioral characteristics assessed at up to 6 interview waves. We distinguish between alternative models of how adult socioeconomic trajectories may mediate the effect of education on cognitive decline. Finally, we use gestimation to examine the importance of social ties, health behaviors, and cardiovascular risk in mediating the effect of education on cognitive outcomes.

Grant: 5R01AG007607-09
Program Director: ELIAS, JEFFREY W.
Principal Investigator: BLANCHARD-FIELDS, FREDDA H. MA
Title: ATTRIBUTIONAL PROCESSES IN ADULTHOOD & AGING
Institution: GEORGIA INSTITUTE OF TECHNOLOGY ATLANTA, GA
Project Period: 1990/04/01-2006/12/31

DESCRIPTION (provided by investigator): Evidence suggests that older adults rely heavily on easily accessible trait-based information. However, findings to date do not indicate universal increases in social judgment biases for older adults. Plausible mechanisms for explaining attributional biases are not limited to processing capacity, but include motivational goals and cognitive style, and accessibility of beliefs and values. For example, when beliefs or rules are violated, adults of any age tend to be biased toward dispositional attributions. These effects may be heightened in older adults. However, at this point there is no definitive evidence that these variables account for such age differences. The aim of this research is to address this issue by further examining attributional biases in two contexts, the causal attribution framework and the attitude attribution paradigm. The first series of studies aims 1) to establish age differences social judgment biases in a new context assessing the correspondence bias and 2) to examine the joint influence of plausible mechanisms accounting for these age differences: general and content-specific values and beliefs, need for closure, and processing load. The next series of studies aims to further refine the previously used schematicity measure utilizing a priming method and systematically evaluating schema valence. In this way, the joint effects of social schematicity, character identification, and experientially based modes of processing on age differences in dispositional biases can be examined. This will culminate in a replication and extension of our original model of individual differences dispositional biases with more refined assessment procedures, better measures of values and beliefs, and by utilizing two assessment paradigms for assessing attributional biases. In the long run, this research will help us understand how attitudes, values, and beliefs influence one's social reasoning process. Understanding such individual differences will help to differentiate adaptive from dysfunctional cognitions in dealing with everyday problem situations, in general, and relationship situations, in particular. Furthermore, age/cohort differences in social schemas and beliefs and their relationship to causal reasoning has implications for understanding the nature of dysfunctional attributions and counseling couples of different age/cohort groups

Grant: 5R01AG020614-02

Program Director: STAHL, SIDNEY M.

Principal Investigator: BLAZER, DAN G MD INTERNAL MED:INTERNAL
MEDICINE-UNSPEC

Title: Antidepressant Use by Older Adults

Institution: DUKE UNIVERSITY DURHAM, NC

Project Period: 2002/09/30-2004/08/31

DESCRIPTION (provided by applicant): Use of antidepressant medications by older adults has increased significantly over the past 10 years. This increase, however, has not been distributed equally by race/ethnicity. To explore antidepressant use in older adults, we propose additional analyses of data from the Duke Established Populations for Epidemiological Studies of the Elderly (EPESE) sample (4,162 community dwelling elders initially interviewed in 1986 and followed over ten years via three additional in person and four telephone follow-up interviews). Detailed current medication use was obtained from sample members during each in-person interview. In controlled analyses, Whites were two to four times as likely to be taking antidepressant medications as African Americans at each survey and the differences by race increased over a ten year period of follow-up. This difference was especially noted between years six and ten of the follow-up study, with 80% of new users of antidepressant medications over this period being White. We propose a model to determine propensities to use antidepressants in Whites and to test the concordance/discordance of this propensity model in African Americans. This model includes eight domains: demographics; education/occupation/economic well being; geographic characteristics; health and mental health; personal attitudes; social and spiritual resources; health behaviors; and physician provider characteristics. The richness of this model derives from additional questionnaire data, HCFA Part A and Part B files, geocoding the residence of sample members, and detailed descriptions of the physicians listed as their primary providers. Hypotheses are proposed to construct propensity scores among Whites for the eight domains including: 1) there will be a decreased propensity to take antidepressants among participants whose primary source of care is a primary care physician who practices in a rural county; and 2) a perceived impairment in the social network will increase the propensity to use antidepressants. Our main hypothesis is that the propensity model derived for Whites will be discordant for African Americans and the discordance will be found in factors for Personal Mastery, spiritual resources, alcohol and medication use, and racial concordance. We will also test hypotheses specific to individual domains in the larger model.

Grant: 5R01AG016672-03
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: BOERSCH-SUPAN, AXEL H PHD
Title: LIVING ARRANGEMENTS, HEALTH AND WEALTH OF THE ELDERLY
Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Project Period: 2001/07/01-2006/06/30

The broad goal of this proposed research is to understand how living arrangements evolve from retirement to death, how they depend on the initial socio-economic status of the elderly at the beginning of their retirement years, and how they might change under different economic and family conditions in the future. We will use five waves of AHEAD data to construct trajectories of living arrangements, health status and wealth, together with income, marital status, family links and labor force status. Based on these trajectories, we will estimate joint transition probabilities of moving between states defined by living arrangement, health status and wealth, taking account of observable covariates and persistent individual-level heterogeneity. We will use these transition probabilities to shed light on behavioral hypotheses and to simulate future living arrangements of the cohort reaching age 70 in the year 2000 under alternative assumptions about future Social Security and Medicare benefits, number and proximity of children, and female labor force participation and similar socio-economic conditions.

Grant: 5R01AG017842-03
Program Director: ELIAS, JEFFREY W.
Principal Investigator: BREWER, MARILYNN B PHD
Title: AGING, INHIBITION, AND STEREOTYPING AND PREJUDICE
Institution: OHIO STATE UNIVERSITY COLUMBUS, OH
Project Period: 2001/02/01-2005/01/31

DESCRIPTION (adapted from investigator's abstract): The goal of this application is to test the hypothesis that elderly people rely on stereotypes more and are more prejudiced than young people because of age-related reductions in the ability to inhibit information. A preliminary experiment revealed that elderly people relied on stereotypes even when instructed not to, whereas young people did not. Elderly people were also more prejudiced than young people, and these differences in stereotyping and prejudice were mediated by age differences in inhibitory ability. Because elderly people reported a stronger desire than young people to control their prejudiced reactions, these results suggest that reductions in inhibitory ability can cause people to become prejudiced against their will. In order to further examine this hypothesis, seven experiments are proposed. These experiments rely on a variety of different measures and manipulations to extend the findings of the preliminary experiment. Experiments are proposed that examine differences in inhibitory ability and stereotyping and prejudice among the elderly based on whether they live independently or in an assisted-living environment; whether they are on-cycle or off-cycle in their circadian rhythms; and whether the measures of stereotyping and prejudice are implicit or explicit. The goal of these experiments is to examine factors that influence inhibitory ability and stereotyping and prejudice among the elderly. Follow-up measures and studies are discussed that examine whether unintended stereotyping and prejudice among the elderly lead to feelings of guilt, loss of self-control, and negative mood states, which in turn are often associated with negative mental and physical health outcomes.

Grant: 1R01AG023397-01
Program Director: CHON-LEE, ANGIE J
Principal Investigator: BUKA, STEPHEN L
Title: Pathways Linking Education/Health in Middle Adulthood
Institution: HARVARD UNIVERSITY (SCH OF PUBLIC HLTH) BOSTON, MA
Project Period: 2003/09/30-2007/08/31

DESCRIPTION (provided by applicant): Research on the association between education and health has not been able to escape the criticism that factors other than education are responsible for this repeatedly observed, but potentially spurious, association. If the association between education and health is causal, the pathways through which education impact health remain to be fully elucidated. This application seeks to 1) obtain an estimate of the effect of education on multiple adult health outcomes independent of several determinants of both schooling and later adult health, and 2) evaluate the contribution of several potential pathways hypothesized to account for the association between education and health. This proposal is submitted by investigators from developmental and social epidemiology, medicine, health education and literacy, economics, psychology and biostatistics, and is based on adult follow-up studies of the New England cohorts of the National Collaborative Perinatal Project. The first aim is to conduct analyses of data recently obtained from a family study of 2,000 subjects who have been followed from birth through age 40; these analyses will incorporate a detailed measure of adult health status, prospective measures of social, familial, and individual determinants of education that were collected between 1959 and 1976, and a sibling design to account for potential unmeasured familial variables. In these analyses we will determine the 'adjusted' effects of education on the following health outcomes: diagnoses of cancer, cardiovascular disease, asthma and diabetes; self-rated health; and behavioral risk factors including current and lifetime indicators of tobacco use and substance abuse. We will also test the hypothesis that psychological processes (depression, anxiety, perceived social status, and perceived stress) mediate the association between education and health. The second and third aims of this study involve new data collection from 800 of these 2,000 subjects. Aim two focuses on elucidating the causal effects of education on biological precursors of cardiovascular disease and diabetes. The third aim will be to investigate the role of education in improving health through enhancement of functional literacy skills. The prospective nature of this study, the comprehensive assessment of parental and childhood variables, and the hypothesis-driven tests of causation and potential mechanisms make this project uniquely suited to evaluate the link between education and improved health outcomes.

Grant: 5R01AG010266-09
Program Director: SHRESTHA, LAURA B.
Principal Investigator: BUMPASS, LARRY L PHD SOCIOLOGY:SOCIOLOGY-UNSPECIFIED
Title: AGING AND THE FAMILY OVER THE LIFE COURSE
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 1992/05/15-2005/03/31

DESCRIPTION (Adapted from the Applicant's Abstract): This is a proposal for an addition to the longitudinal data from the National Survey of Families and Households. NSFH occupies a unique niche defined by the great depth of data on family interactions (up, down, and across the generational ladder) in the context of a holistic approach that includes measurement across a wide range of substantive domains. It is a companion proposal to a revision that is under review by NICHD, which is limited to the re-interview of parent-child dyads. Those data will frustrate researchers who want to address other topics on aging, both because of the selective nature of this population for other purposes and because virtually all of the parents will be under age 60. The current proposal to NIA would remedy that situation by complementing the NICHD proposal and making possible central aging analyses that would otherwise be precluded by the restriction to the parent-child sample. Under this proposal to NIA, approximately 10,907 subjects would be surveyed, including 6072 main respondents, 2948 original spouse/partners, 1072 new spouse/partners at NSFH-2, and 815 new spouse/partners at NSFH-3. This NIA addition to the sample will range in age from the thirties to the nineties. Previous NSFH data collection has accumulated considerable information about the respondent's parents and their childhood (including childhood socioeconomic status). Complete life event history information is available for respondent's living arrangements in childhood, cohabitation, marriage and union stability, fertility, and employment. Proximity, contact, caregiving, relationship quality, co-residence, and the exchange of financial, instrumental, and emotional support with adult children and parents (and parents-in-law) has been tracked. Relationship quality with spouse, contact and support (including caregiving) exchange with siblings, other relatives, and friends has been assessed. Information on social integration in community and religious activities as well as about a wide range of social psychological attitudes, including attitudes about intergenerational obligations and orientations toward retirement is available. Detailed information about income, wealth, physical health, and psychological well being was included at both prior waves of the survey. The new wave will extend these observations for another 8 years, more than doubling the number of transitions observed between the first two waves.

Grant: 1R01AG022488-01
Program Director: SHRESTHA, LAURA B.
Principal Investigator: CAGNEY, KATHLEEN A PHD
Title: Neighborhood Context and the Health of Older Adults
Institution: UNIVERSITY OF CHICAGO CHICAGO, IL
Project Period: 2003/09/30-2007/08/31

DESCRIPTION (provided by applicant): The capacity of communities to bolster and sustain the well being of individual residents is particularly salient for older adults; their daily activities are likely dependent on the infrastructure and social resources of their communities, particularly if health is already compromised. Although it has long been believed that the neighborhood one lives in affects one's health, it has been difficult to delineate why, and under what circumstances, neighborhood context contributes to health. We bring an important new sociological concept, collective efficacy, to bear on the study of neighborhood and the health of older persons. Using data from the Project on Human Development in Chicago Neighborhoods-Community Survey, the Metropolitan Community Information Center-Metro Survey, Medicare Claims, and out-patient, hospitalization, and geocoded health services data, we ask: 1) Are structural features of urban neighborhoods--concentrated poverty, concentrated affluence, residential stability, ethnic heterogeneity, and age structure associated with the health status of older residents?; 2) Are neighborhood social processes--collective efficacy, social networks, social norms, and physical/social disorder associated with the health of older residents?; 3) is the health services infrastructure of the neighborhood associated with the health of older residents?; and 4) Does the health of older residents affect the ability of the community to sustain social networks and develop collective efficacy? This project goes beyond current research in four ways. First, it extends existing research on neighborhood context and the health of older adults by exploring theoretically informed mechanisms with multi-level statistical tools. Second, it incorporates an understudied area in the neighborhood effects literature--the role of health services and access to care. Simultaneously examining the effects of neighborhood context and health services could enhance our understanding of individual-level racial/ethnic and socioeconomic disparities in health. Third, it acknowledges that the relationship between neighborhood and health is both reciprocal and dynamic. Fourth, it provides a unique opportunity to examine interactions across a number of levels (e.g., individual-neighborhood, neighborhood-health services infrastructure). This project combines perspectives from sociology and health services research; it bridges these disciplines to formulate research that addresses a set of questions vital to both fields and to aging-related policy.

Grant: 5R01AG019825-02
Program Director: ELIAS, JEFFREY W.
Principal Investigator: CARLSON, MICHELLE C BA
Title: Cognitive Pathways to Disability
Institution: JOHNS HOPKINS UNIVERSITY BALTIMORE, MD
Project Period: 2002/09/30-2007/08/31

DESCRIPTION (provided by applicant): Converging lines of evidence suggest that age-related changes in cognition, and particularly, executive function may exert downstream effects on physical function. However, there is a paucity of data regarding the role of these functions in the natural history of physical disability. We propose to address this gap by building on an established ongoing prospective cohort study of initially high-functioning women, aged 70-80 at baseline, the Women's Health and Aging Study II (WHAS II). Thus, our first aim of this ancillary study is to characterize rates of change in various domains of cognitive function over a 9-year interval. Less clear is whether these changes in cognition predict performance-based changes and self-reported transitions to preclinical difficulty independent of the well-studied mobility pathway. Thus, our second aim will be to test the value of a cognitive pathway to preclinical difficulty and disability in three groups of functional outcomes, categorized according to the putative demands they place on mobility, cognition, or both pathways. Our third set of aims will parallel the WHAS II's innovative efforts to assess preclinical functional difficulty in the mobility pathway by developing more valid and sensitive assessment method to better capture functional changes and compensations in complex activities of daily living typically not reported using standard self-report methods. Our fourth aim seeks to translate these epidemiologic findings into clinical terms by exploring how threshold relationships between cognition and physical function correspond to standard clinical indices of cognitive impairment. The WHAS II offers a unique opportunity to explore in-depth causal pathways between cognition and progression to physical disability for numerous reasons. The majority of women have been retained and evaluated over repeated intervals using state-of-the-art self-report measures comprehensive assessments of mobility, basic, and complex physical functions, and, a uniquely enriched cognitive protocol, developed extensively by the principal investigator. We will synthesize research findings from this study to inform the broader aims of the WHAS II renewal study to develop a conceptual framework that prospectively identifies precursors and major pathways in the natural history of disability. Understanding the roles that cognition may play in the transitions to disability will provide opportunities for better identifying at-risk individuals and developing targeted primary and secondary preventive interventions.

Grant: 5R01AG008816-13
Program Director: ELIAS, JEFFREY W.
Principal Investigator: CARSTENSEN, LAURA L MA
Title: SOCIOEMOTIONAL FUNCTIONING IN ADULTHOOD AND OLD AGE
Institution: STANFORD UNIVERSITY STANFORD, CA
Project Period: 1990/09/01-2004/12/31

The aim of this competing renewal application is to continue a programmatic line of research undertaken in 1990 that seeks to understand age differences in social motivation in adulthood and old age. The behavioral phenomenon that originally prompted this investigation was the reliable age-related reduction in social contact and social interaction in old age. At that time, "concern" best described the societal and research response to the phenomenon. General consensus in the field was that observed reductions in social contact were associated with deleterious consequences for physical and mental health. Senior centers were established in virtually every American city, intervention efforts aimed at drawing out older people were undertaken, and studies aimed at documenting the nature of emotional distress in old age were in full force. Over the past ten years, however, findings from this laboratory have contributed to a small but growing literature that shows clearly that older people are not suffering emotionally from a reduction in social contact. On the contrary, emotional functioning is at least well maintained in old age, and possibly improves. Compared to their younger counterparts, older people pay greater attention to emotion in everyday life, prefer emotionally close social partners and, by self-report, regulate their emotions better. Yet, beyond these provocative findings, we know less about emotion in old age than any other time in life. Five studies of emotion are proposed. Three examine potentially complementary cognitive and biological mechanisms that may play a role in improved emotion functioning. A fourth study involves a third wave of data collection in a longitudinal sequence design based on an experience sampling of emotions in everyday life. The fifth study proposes to extend investigation of emotional preferences from social relations to consumer behavior by examining relative preferences for advertisements that are couched in emotional versus non-emotional terms. Emotion is at the core of goal directed behavior and if society is to harness the potential of the aging population, and to intervene where necessary with effective interventions, understanding what motivates older people is clearly prerequisite.

Grant: 5R01AG018782-03

Program Director: STAHL, SIDNEY M.

Principal Investigator: CHATTERS, LINDA M
PHD DEVELOP
PSYCH:DEVELOPMTL
PSYCHOL-UNSPEC

Title: CHURCH-BASED ASSISTANCE AND OLDER BLACKS

Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI

Project Period: 2001/03/15-2005/02/28

DESCRIPTION: This application proposes to investigate the correlates and functions of church-based informal assistance among Black Americans. These analyses will examine church assistance with a specific focus on the influence of religious involvement and social location factors (e.g., age, gender, and marital status) in determining both the quantity and quality of church-based support (i.e., network integration, enacted and perceived support). The proposed analyses will examine the impact of church support on the relationship between social stressors and various psychological well-being and physical health status outcomes. Further, this proposal will examine the influence of assistance from church and family members on the relationship between social stressors and physical health and psychological well-being. These relationships will be examined both cross-sectionally and using panel data. This proposed investigation of church-based informal social support is based on the National Survey of Black Americans (NSBA) and the three additional waves of the NSBA Panel Study. The background research and conceptual model guiding this research are derived from several literatures including: 1) religious involvement, 2) religion and health, 3) informal social support, and 4) stress, social support and health/well-being, relevant model components will specify multifactoral models of these relationships which will be analyzed using a variety of multivariate procedures. These will include OLS regression, logistic regression, path analysis, and covariance-structure modeling. The proposed research will contribute to our understanding of the correlates of church-based assistance as well as its impact on the health and well-being of Black Americans.

Grant: 5R01AG018362-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: CHEWNING, BETTY A PHD
Title: Older Adults & Drug Decisions: Collaboration & Outcomes
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 2002/09/15-2006/08/31

DESCRIPTION (provided by applicant): Midst growing time pressures on physicians, there is a need to maintain and even enhance the quality of physician-patient encounters, particularly for vulnerable, older adults with chronic conditions. Substantial research suggests that older adults are more passive than other age groups during their visits. Hence, physicians may miss key information about patient concerns and regimens that could affect health outcomes. This research addresses gaps identified by literature reviews calling for studies evaluating interventions that efficiently elicit patient pre-visit expectations for physicians and examine the longitudinal effect of expectation fulfillment on patient outcomes. The goal of this research is to study the impact of an intervention that identifies pre-visit concerns of older adult patients and then prompts both patients and physicians to address these concerns in the visit. Older adults' functional status concerns will be identified briefly in the waiting room using a handheld computer. A printout summarizing patient responses will be given both to the physician and patient. We hypothesize that this prompt will affect the nature of the patient-provider encounter in such a way that health outcomes will be improved. To test these hypotheses, a final sample of 580 patients age 60 or older, with a formal diagnosis of rheumatoid arthritis will be enrolled at their clinic visit. A one-year randomized, controlled experiment will be used in which an experimental group patients receive a computerized assessment and prompt about their visit concerns while a control group receives a parallel placebo computerized assessment of their exercise patterns. In both cases, patient assessment summaries are given to the patients and to their physicians in the medical record. Baseline, 6 month and 12 month data will be collected on each patient. We hypothesize improved health status at 12 months for the primary outcomes of pain and physical function. Selected encounter dynamics hypothesized to help explain these outcomes will also be examined. We will audiotape patient-physician encounters to study these interaction dynamics. The primary analyses will examine differences at 12 months between the control and experimental groups using ANCOVA for continuous variables with baseline values of outcomes as a covariate, Dichotomous outcomes will be analyzed primarily by the Mantel Haenszel test and logistic regression.

Grant: 3R01AG018362-02S1
Program Director: STAHL, SIDNEY M.
Principal Investigator: CHEWNING, BETTY A PHD
Title: Older Adults & Drug Decisions: Collaboration & Outcomes
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 2002/09/15-2006/08/31

Abstract Text Not Available

Grant: 3R01AG018362-02S2
Program Director: STAHL, SIDNEY M.
Principal Investigator: CHEWNING, BETTY A PHD
Title: Older Adults & Drug Decisions: Collaboration & Outcomes
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 2002/09/15-2006/08/31

Abstract Text Not Available

Grant: 5R01AG017548-03
Program Director: SHRESTHA, LAURA B.
Principal Investigator: CHRISTAKIS, NICHOLAS A MD
Title: Relationship of Morbidity and Mortality Between Spouses
Institution: HARVARD UNIVERSITY (MEDICAL SCHOOL) BOSTON, MA
Project Period: 2001/09/30-2006/12/31

DESCRIPTION (provided by applicant): Employing the perspective and methods of the demography of aging, we propose to examine the relationship between the morbidity and mortality of spouses. We ask questions about how the morbidity and mortality of one spouse, and the timing and nature of that morbidity and mortality, affects the morbidity, mortality, and timing and nature of morbidity and mortality in the other spouse. For example, is the hazard of death in one spouse (the "proband") increased by illness or death in the other spouse? If so, how does the proband's hazard of illness or death change over time after the onset of illness or death in spouse? How do these effects vary according to the type of severity or duration of the spouse's morbidity? Do particular illnesses in spouses place probands at particularly high risk of development illness or dying themselves? What role do socio-demographic factors play in all these effects? To address these questions most effectively, we will create a new panel data set with demographics socioeconomic, and health information about one million elderly married couples followed up to ten years. Using a variety of even history and fixed effects methods, we will conduct four main analyses. First, we will evaluate morbidity in one spouse influences mortality in the other. We hypothesize that individuals married to unhealthy spouses will have worst mortality than those married to healthy spouses, and that the longer the spouses is ill, the greater the effect. We also hypothesize the certain types of spousal morbidity (e.g. those that most compromise activities levels) will be worse for probands. Second, we will reevaluate the widower effect (i.e. the increased tendency of the bereaved to die), but we will; adjust for the health of both spouses prior to widowhood; examine it's temporal shape in detail; and assess its dependence on socioeconomic factors. Third, we will evaluate how morbidity in one spouse influences morbidity in the other. Are healthy spouses better able than unhealthy spouses to provide health benefits in marriage? Four, we will evaluate the impact of widowhood on the morbidity, and not just mortality, of bereaved spouses. Our work advances the demographics of aging by; closely examine how an individual's morbidity and mortality are affected by the presence or absence of spousal support; focusing on cause-of-death specific aspects of demographics phenomena; examine theoretically interesting sub-populations along gender, race, socioeconomic, and health status lines; and shedding light on the mechanisms of inter-spousal health effects. Our work also has policy implications in that it; supports more accurate projections of the health burdens in the elderly; facilitates targeting of support services to the growing numbers to the widowed elderly; and addresses important populations, such as minorities the poor, the oldest old, those with dementia, and caregivers.

Grant: 3R01AG016588-04S1
Program Director: STAHL, SIDNEY M.
Principal Investigator: CLARK, PHILLIP G SCD
Title: STAGE BASED HEALTH PROMOTION WITH THE ELDERLY
Institution: UNIVERSITY OF RHODE ISLAND KINGSTON,, RI
Project Period: 1999/06/15-2004/03/31

Abstract Text Not Available

Grant: 5R01AG016750-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: CONTRADA, RICHARD J BA
Title: RELIGION, AGING, AND ADAPTATION TO OPEN-HEART SURGERY
Institution: RUTGERS THE ST UNIV OF NJ NEW BRUNSWICK, NJ
BRUNSWICK
Project Period: 2000/02/01-2005/01/31

DESCRIPTION (adapted from investigator's abstract): Many middle-adult and older individuals face adaptive challenges stemming from chronic disease and its invasive treatment, which have acute and long-term effects on psychological well-being, quality of life, morbidity, and mortality. Religion and spirituality have received little attention as factors that may promote adaptation to chronic illness, despite their relevance to a large proportion of middle-aged and older adults in the U.S. Moreover, little is known about possible increases in religiousness and spirituality caused by serious illness, a factor that may account for frequently observed associations between religiousness and age/cohort. This project will examine the bi-directional relationships between religion/spirituality in adaptation to physical illness in open-heart surgery patients. It will employ a newly-constructed measure that includes multiple dimensions of religiousness/spirituality that have not heretofore been examined in relation to physical health and aging. A sample of 575 patients undergoing elective, open-heart surgery will be recruited into a prospective, longitudinal study. Biomedical and psychosocial data will be collected prior to surgery and at 2-week, 6-month, and 12 month follow-ups. The following hypotheses will be tested: (1) religiousness/spirituality facilitates adaptation to open-heart surgery; (2) beneficial effects of religiousness/spirituality are mediated by health behaviors, traditional psychosocial factors, and emotion; (3) older age is associated with greater beneficial effects of religiousness/spirituality; and (4) undergoing open-heart surgery increases religiousness/spirituality. This research will contribute to understanding the interplay between aging, physical disease, and psychological well-being, within a framework that integrates religiousness/spirituality with other adaptive resources deriving from the individual's personal attributes and social environment.

Grant: 5R01AG019637-02
Program Director: CHON-LEE, ANGIE J
Principal Investigator: COSTA, DORA L MA
Title: Older Age Health and Longevity: A Long-Term View
Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Project Period: 2002/09/01-2007/08/31

DESCRIPTION (provided by applicant): Mortality rates at older ages have been falling throughout the twentieth century. By 2050 at least 20 percent of the population of the United States is expected to be older than 64. The consequences of mortality decline for older age health are still disputed. One view holds that rising longevity may increase both chronic disease and disability rates. Another view holds that the onset of both chronic disease and disability rates may be postponed. Alternatively, even though declines in mortality may increase the prevalence of chronic disease rates, the rate of progression of chronic disease and therefore of disability may fall. Although the short-run consequences of mortality declines for older age health may differ from the long-run consequences, the evidence suggests that in the long-run population aging has been accompanied by improvements in elderly health. Several factors could account both for long-term improvements in elderly health and for increases in longevity at older ages. This project will use data on both recent and past populations to investigate the plasticity of aging to assess explanations for long-run trends in disease, disability, and death. Among the explanations considered will be reduced infectious disease rates, reduced occupational risk and improvements in socioeconomic status, and improved nutritional intake. The project will focus on the role of these factors in both older age and young adult health proxies to determine the timing of when infectious disease, occupational risk, socioeconomic status, and nutritional intake affect health declines. The project will examine the role of these factors not just in disease and mortality rates, but also in cognitive functioning at older ages. The project will also examine the social construction of disability by investigating changes in the relationship between disability and labor force participation. In addition, it will estimate the economic gains to improvements in chronic disease, disability, and death rates, apportioning the economic gains to those due to improvements in reduced infectious disease rates and to changes in socioeconomic status. The findings have implications for theories of aging; for forecasting future health and mortality trends; for assessing policies aimed at reducing the fiscal deficits in Social Security Old Age Insurance and Medicare; and for assessing the economic gains to investments in biotechnology and innovations in medical care.

Grant: 5R01AG020175-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: COUNSELL, STEVEN R MD
Title: Geriatric Resources for Assessment and Care of Elders
Institution: INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS, IN
INDIANAPOLIS
Project Period: 2002/03/01-2006/02/28

DESCRIPTION (provided by applicant): We are proposing an innovative strategy to reduce fragmentation and improve the quality of care for a population of low income older adults with multiple chronic conditions and high health care costs. Prior studies have hypothesized that if the preventive care and ambulatory care for vulnerable older adults could be improved then disability, hospitalizations, nursing home placements, and costs could be reduced. Furthermore, recent studies have suggested that disparities in health outcomes among poor urban older adults might be reduced through efforts to improve the underdiagnosis and undertreatment of common geriatric syndromes. The most powerful interventions to achieve quality improvement for older adults involve system-level changes rather than interventions targeted at individual providers. The specific aim of this proposal is to conduct a four-year randomized controlled clinical trial to test the effectiveness of a collaborative model of team care as compared to usual care in improving functional outcomes among community-dwelling low-income older adults. This collaborative model of team care, Geriatric Resources for Assessment and Collaborative Care of Elders (GRACE) builds on the growing body of geriatric health services research suggesting that coordinated care across the continuum of care may improve outcomes for patients with chronic illness. The proposed intervention involves a geriatric nurse practitioner and a geriatric social worker caring for the vulnerable older adult in collaboration with the patient's primary care physician and in consultation with a geriatric specialty team. The specific components of GRACE mirror those recommended in recent reviews: a) specific targeting of elders at risk; b) availability of collaborative expertise in geriatrics; c) integration of the program into primary care; d) coordination of care across all sites of care; e) integration of data systems that support physician's practice and facilitate monitoring of pertinent clinical parameters; and f) institutionally endorsed clinical practice guidelines. We are hypothesizing that, compared to usual care, patients enrolled in the intervention will have: greater independence in activities of daily living, better health status scores, fewer nursing home days, and fewer hospitalizations over 2 years of follow-up.

Grant: 5R01AG019827-03
Program Director: SHRESTHA, LAURA B.
Principal Investigator: COVINSKY, KENNETH E MD
Title: Prognosis/Risk Indices for Function/Mortality in Elders
Institution: NORTHERN CALIFORNIA INSTITUTE RES & SAN FRANCISCO, CA
EDUC
Project Period: 2001/09/30-2004/08/31

The goal of this project is to develop and validate two prognostic indices that will stratify community living elders into groups according to risk for two outcomes: mortality and functional deterioration. Our results will be important to efforts to improve outcomes in older people because prognostic indices facilitate efforts to improve healthcare on the clinical level (physician counseling of patients), the policy level (risk adjustment and comparing outcomes across providers), and the public health level (evaluating the effect of a risk factor on outcomes). In spite of the important role prognostic indices could play in improving outcomes in older people, there are few appropriately validated indices available for use in general groups of community-dwelling elders. This project is guided by a conceptual framework that recognizes that outcomes in older people are the result of multiple domains of risk that interact together. These domains include demographic factors (age and gender), biomedical factors (disease), functional status (physical, cognitive, and psychological), and social factors (social support, ethnicity and SES). Our consideration of multiple domains that are clearly important to outcomes in the elderly will be an innovative component of this study. We will use a unique database of 7447 subjects (age less than or equal to 70) compiled from the AHEAD study to develop and validate our prognostic indices. This database is unique 166th in terms of the diversity of its subjects and the availability of information on most of the important domains of baseline risk. We will first divide the dataset into derivation and validation components. Next, we will describe the relation of each predictor variable to each outcome (survival time over five years, and increased dependence in ADL function over two years) in the derivation set. Within each risk domain, we will determine the variables that best predict each outcome. Next, we will use multivariate methods to determine which variables independently predict each outcome. We will use these multivariable models to develop a simple point scoring system to stratify subjects into categories at variable risk of each outcome. Finally, we will use the validation set to test the accuracy and transportability of our prognostic indices, as measured by their calibration and discrimination. The results of this project will be prognostic indices useful to clinicians, epidemiologic and health services investigators, and policy makers.

Grant: 1R01AG023347-01
Program Director: SHRESTHA, LAURA B.
Principal Investigator: CRIMMINS, EILEEN M PHD
Title: Biological Risk Underlying Education Health Differences
Institution: UNIVERSITY OF SOUTHERN CALIFORNIA LOS ANGELES, CA
Project Period: 2003/09/30-2007/08/31

DESCRIPTION (provided by applicant): This project will explore how differences in educational attainment result in differential patterns of biological risk for a wide range of poor health outcomes. The proposed research will investigate cumulative biological risk profiles that underlie educational differences in rates of disease, disability, and death. Biological risk is conceptualized in this work as a summary of dysregulation and risk across a number of indicators including cardiovascular functioning, metabolic functioning, the inflammatory system, organ system dysfunction, and levels of vitamins and antioxidants. In addition to education, these biological risk factors will be related to a set of demographic, social, behavioral, psychological, health care availability and economic indicators to better understand the sources of observed education-related differences in biological risk profiles. The biological factors will also be included as independent variables in models predicting health outcomes to understand their mediating role between education and more downstream health outcomes. Use of the National Health Nutrition and Examination Surveys I, II, III, and IV will allow examination of the relationships between educational attainment and biological risk and a variety of health outcomes for African Americans, Hispanic Americans (largely of Mexican origin), and Non-Hispanic Whites across all adult ages (20 and above) and across a period of time (from 1971 until 2002). The specific aims of the project are to: 1) Clarify the patterns of biological risk across a range of physiologic markers by educational attainment in order to identify the biological risk factors related to the "earlier aging" of people with lower education. 2) Explore mechanisms which mediate education influences on biological risk. 3) Examine the links between education, biological risk, and health outcomes to determine the biological mechanisms that mediate the education/health relationship. 4) Examine changes over time in the patterning of biological risk by education.

Grant: 5R01AG015911-05
Program Director: SUZMAN, RICHARD S.
Principal Investigator: CUTLER, DAVID M PHD
Title: POPULATION AGING, MEDICAL COSTS, AND VALUE OF TECHNOLOGY
Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Project Period: 1999/05/01-2004/04/30

Abstract Text Not Available

Grant: 5R01AG019805-03
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: CUTLER, DAVID M PHD
Title: Understanding Disability Among The Elderly
Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Project Period: 2001/09/30-2004/08/31

DESCRIPTION (provided by applicant): Life expectancy among the elderly is increasing at a rate of nearly 1 month per year. This dramatic improvement in longevity has led to questions about whether morbidity is falling as well, or whether additional years of life are in a less healthy state. A spate of recent evidence suggests that disability among the elderly has been falling at least for the past two decades (Allaire et al., 1999; Manton et al., 1997; Freedman and Martin, 1998, 1999), or at worst not increasing (Crimmins et al., 1997), and that people who live longer have less lifetime disability (Vita et al., 1998). This proposal seeks to understand disability trends among the elderly. The specific aims are: 1) to document trends in disability in different surveys, and reconcile differences across surveys; 2) to decompose changes in disability into changes in disease prevalence and changes in the extent of disability conditional on diseases; and 3) to differentiate among alternative economic and social explanations for declining disability. Three classes of theories in particular will be examined: (1) that disability change is a result of personal characteristics such as socioeconomic factors and individual behaviors; (2) that disability change results from changes in medical or assistive technologies; and (3) that disability change results from changes in the disease environment.

Grant: 3R01AG019805-03S1

Program Director: PATMIOS, GEORGEANNE

Principal Investigator: CUTLER, DAVID M PHD ECONOMICS

Title: Understanding Disability Among The Elderly

Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA

Project Period: 2001/09/30-2004/08/31

Grant: 5R01AG020275-03
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: DEATON, ANGUS S MA
Title: POVERTY, INEQUALITY AND HEALTH IN ECONOMIC DEVELOPMENT
Institution: PRINCETON UNIVERSITY PRINCETON, NJ
Project Period: 2001/07/01-2006/06/30

We propose to collect data on individuals' health and economic status in a series of household surveys in India (where a third of the world's poor live) and in South Africa (which is experiencing simultaneous economic, social, and epidemiological transitions). The surveys will be both methodological (developing new questionnaires, e.g. to improve morbidity measures, to link social standing and inequality, to measure happiness and dignity) and substantive (collecting sufficient data for meaningful analysis). The questionnaires will collect a wide range of consumption and income information, in addition to self-reported, anthropometric, and clinical measures of physical, mental, and social health, and the analysis of the data will explore a range of links between money and health. The surveys will cover people of all ages, but will have a non-exclusive focus on the elderly; the effects of pensions in both India and South Africa, and of child grants in South Africa are of great interest. The proposal also covers secondary data analysis in both countries, and internationally, as well as the linking of the new data with previous information, e.g. from censuses and national sample surveys. An important line of proposed research is the construction of a time-series of cross-sections for the 80 regions of India on linked consumption, income, education, and health measures from the (only recently available) National Sample Surveys, a mine of data, including education, aging, and health, that has been previously little used. We also propose theoretical and empirical work on the effects of differences in life-expectancy on saving, both within and across countries.

Grant: 5R01AG021147-02
Program Director: ELIAS, JEFFREY W.
Principal Investigator: DIEHL, MANFRED K PHD
Title: Self-Concept Organization Across the Adult Life Span
Institution: UNIVERSITY OF FLORIDA GAINESVILLE, FL
Project Period: 2002/09/15-2006/08/31

DESCRIPTION (provided by applicant): Two studies are proposed to investigate age differences in self-concept organization across the adult life span, and the extent to which different self-concept organizations are related to affect regulation. These goals are addressed by studying (a) a sample of healthy adults, and (b) a sample of adults who are treated for cancer. The specific aims are: (1) To examine age differences in self-concept organization across the adult life span: Although research with younger age groups has documented the stress-moderating effects of self-complexity (SC) and self-concept differentiation (SCD), knowledge about the adaptive value of these self-concept organizations in adulthood and their relationship with age is limited. Based on findings from earlier work, it is hypothesized that SC will be highest in middle age and lower in young and older adults. Conversely, SCD is hypothesized to be lowest in middle age and higher in young and older adults. (2) To examine the self-regulatory effects of self-representations by modeling daily variation in affect as a function of self-concept organization and daily stress: Self-related knowledge is important for interpersonal functioning and for the regulation of one's own behavior. Building on the existing work in this area, a daily diary study is proposed to examine the self-regulatory functions of self-representations over a 30-day period. Specifically, intra- and inter-individual variability in affect will be modeled as a function of daily stress and SC and SCD. It is hypothesized that SC and SCD will moderate the effects of daily stress on intra- and inter-individual variability in daily affect. (3) To examine the self-regulatory effects of self-representations on affect regulation in adult cancer patients: Being treated for cancer challenges a person's self-concept, self-regulation, and PWB in profound ways. A daily diary study is proposed drawing on 60 men (age 45+) with prostate cancer and 60 women (age 45+) with breast cancer. It is expected that the effect of SC and SCD on affect variability will be significantly stronger in cancer patients than in their healthy counterparts. It is also hypothesized that the moderating effects of SC and SCD on affect variability are significantly ($p < .05$) greater in the cancer sample than in the healthy sample. The results of these studies will advance the field by providing a more accurate understanding of the role of self-concept organization in affect regulation in healthy and ill adults. This application is submitted under the new investigator provision

Grant: 3R01AG019345-02S1
Program Director: STAHL, SIDNEY M.
Principal Investigator: ECKERT, JOHN K PHD
Title: Transitions From Assisted Living: Sociocultural Aspects
Institution: UNIVERSITY OF MARYLAND BALT CO CAMPUS BALTIMORE, MD
Project Period: 2001/07/15-2005/06/30

DESCRIPTION (provided by applicant): Assisted Living (AL) represents a relatively recent and increasingly important form of environmentally supportive setting for the aged. Little is known, however, about many dimensions of AL. In general, AL units provide few and strictly limited health interventions and employ few health personnel. Significantly, residents must transfer from AL facilities at the point at which their health and other declines exceed the capacity of the AL facility and its personnel to care for them. Generally, residents leave AL facilities for nursing homes. The general aim of the proposed 4-year qualitative, anthropological study is to explore the experiences of AL residents as they prepare to leave their facility as part of the transition from AL resident to a next living setting. It is the operating assumption of this proposed research that within the culture of AL, indicators of cognitive, health, personal, and social status will be of special importance and concern, as members of the AL community "read" the signs and indicators of one's own and others' status. The major specific aims of the proposed research are these: (1) to examine the social and cultural processes of change and decline leading to transfer from assisted living; (2) to understand how residents, their family, and the AL staff read and interpret signs of decline, improvement, normalcy and change in the social and cultural environment of AL facilities; (3) to understand how the "explanatory models" (Kleinman, 1981) used by residents, family and caregiving staff and administrators to empirically monitor the processes of stability, decline and change map onto issues of retention and transfer; and (4) to examine facility-level characteristics as these might shape the processes of stability, decline and change. We propose a qualitative, ethnographic sequential study of 6 AL facilities in Maryland, to be varied by type of facility ("small," "traditional," and "new model") and level of care (2" or 3," according the Maryland system). Project staff will spend 4-5 months in each of the study facilities undertaking participant observation and in-depth qualitative interviews with residents, family, and staff. Data gathered in the study will be analyzed using qualitative and ethnographic techniques.

Grant: 5R01AG019345-03
Program Director: STAHL, SIDNEY M.
Principal Investigator: ECKERT, JOHN K PHD
Title: Transitions From Assisted Living: Sociocultural Aspects
Institution: UNIVERSITY OF MARYLAND BALT CO CAMPUS BALTIMORE, MD
Project Period: 2001/07/15-2005/06/30

DESCRIPTION (provided by applicant): Assisted Living (AL) represents a relatively recent and increasingly important form of environmentally supportive setting for the aged. Little is known, however, about many dimensions of AL. In general, AL units provide few and strictly limited health interventions and employ few health personnel. Significantly, residents must transfer from AL facilities at the point at which their health and other declines exceed the capacity of the AL facility and its personnel to care for them. Generally, residents leave AL facilities for nursing homes. The general aim of the proposed 4-year qualitative, anthropological study is to explore the experiences of AL residents as they prepare to leave their facility as part of the transition from AL resident to a next living setting. It is the operating assumption of this proposed research that within the culture of AL, indicators of cognitive, health, personal, and social status will be of special importance and concern, as members of the AL community "read" the signs and indicators of one's own and others' status. The major specific aims of the proposed research are these: (1) to examine the social and cultural processes of change and decline leading to transfer from assisted living; (2) to understand how residents, their family, and the AL staff read and interpret signs of decline, improvement, normalcy and change in the social and cultural environment of AL facilities; (3) to understand how the "explanatory models" (Kleinman, 1981) used by residents, family and caregiving staff and administrators to empirically monitor the processes of stability, decline and change map onto issues of retention and transfer; and (4) to examine facility-level characteristics as these might shape the processes of stability, decline and change. We propose a qualitative, ethnographic sequential study of 6 AL facilities in Maryland, to be varied by type of facility ("small," "traditional," and "new model") and level of care (2" or 3," according the Maryland system). Project staff will spend 4-5 months in each of the study facilities undertaking participant observation and in-depth qualitative interviews with residents, family, and staff. Data gathered in the study will be analyzed using qualitative and ethnographic techniques.

Grant: 1R01AG022987-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: ENGELHARDT, GARY V PHD
Title: Pension Wealth Calculators for Employer-Provided Plans
Institution: SYRACUSE UNIVERSITY SYRACUSE, NY
Project Period: 2003/09/30-2005/08/31

DESCRIPTION (provided by applicant): This project develops a new defined contribution and 401(k) plan pension calculator to work with the matched employer pension data in the Health and Retirement Study (HRS), Survey of Consumer Finances (SCF), Panel Study of Income Dynamics (PSID), and the National Longitudinal Study of Mature Women (NLS-MW). The calculator employs researcher-defined wage and voluntary contribution histories, rates of return, inflation rates, along with pension plan and individual characteristics to calculate a large number of important output measures commonly used in retirement and saving research, including the present value of future pension entitlements, time series of employer and employee contributions, and employer matching rates for 401(k) contributions. The calculator can be used for a wide variety of pension analysis, including simulations. An important innovation is the integration and use of administrative covered earnings and W-2 data from the Social Security Administration (SSA). The calculator will have broad application in research on the labor force participation and retirement saving of older workers and retirement income security. The current version of the calculator runs in SAS. The proposed research will (1) extend the capabilities to include additional features of value to researchers interested in retirement, saving, and elderly income security issues, such as annuity payouts and links to restricted-access administrative SSA earnings histories, (2) provide to the research community users' guides and versions of the calculator that run in SAS and STATA, the two most popular statistical packages used by researchers in this area and two of the data formats supported by the HRS data distribution system, (3) provide SAS and STATA versions of the calculator to run on the matched pension data in the 1998 HRS, 1998 PSID, 1983 SCF, 1989 SCF, and the 1989 NLS-MW, and (4) analyze the soon-to-be-released 1998 HRS and PSID pension plan characteristics data.

Grant: 5R01AG013987-06
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: FENNELL, MARY L BS
Title: Post-BBA Changes in Rural Hospital LTC Strategies
Institution: BROWN UNIVERSITY PROVIDENCE, RI
Project Period: 1996/08/15-2005/05/31

DESCRIPTION (provided by applicant): The ongoing implementation of the 1997 Balanced Budget Act (BBA) and the 1999 Balanced Budget Refinement Act (BBRA) continues to adversely affect reimbursements to hospitals and post-acute/long-term care providers. Reimbursement incentives in each setting may be having the practical effect of limiting access to care for Medicare patients requiring complex and costly services, thus further fragmenting the fee-for-service (FFS) continuum of care for the most vulnerable Medicare beneficiaries. A fragmented continuum of care is especially problematic in rural areas, where disruptions can leave large gaps in access to care if the strategic options of providers are constrained or inter-provider relationships (e.g., hospital to nursing home) are weak. Although the intended effects of the BBA and BBRA were to control costs, there are a wide range of possible unintended effects on rural hospitals, their hospital-based nursing homes and home health agencies, and the relationship between hospitals and external post-acute and long-term care providers. The unintended effects on rural hospitals may involve their adoption and/or abandonment of integration strategies, which in turn may affect the care of rural Medicare beneficiaries as well as the overall financial performance of rural hospitals. The results of our earlier study of rural hospitals and their post-acute and long-term care strategies offer a unique baseline from which to examine the unintended effects of the BBA and BBRA. We plan to address three specific aims: (1) To assess how the BBA and BBRA have affected the organizational strategies of rural hospitals to either diversify into long-term care or link to external providers of long-term care; (2) To assess the impact of BBA and BBRA-related strategic behavior on the timing and placement of discharges among at-risk Medicare patients treated in rural hospitals; and (3) To assess the impact of BBA and BBRA-related strategy changes on the financial performance of rural hospitals.

Grant: 5R01AG011705-08
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: FERRARO, KENNETH F. MA
Title: AGING AND HEALTH TRAJECTORIES AMONG BLACK & WHITE ADULTS
Institution: PURDUE UNIVERSITY WEST LAFAYETTE WEST LAFAYETTE, IN
Project Period: 1994/09/01-2004/08/31

DESCRIPTION (Adapted from the Applicant's Abstract): The overall aim of this study is to systematically examine the relationship between health trajectories and hospitalization among White and African-American adults over a 20-year period. It is well known that African Americans have more health problems than White Americans as manifested on most indicators of morbidity and mortality. Recent longitudinal studies also show that the health trajectories of African Americans decline more rapidly. This application describes work for a competing continuation project to examine patterns of hospitalization among Black and White adults to better understand health inequality in American society and the mechanisms for the more rapid health declines. The research makes use of the National Health and Nutrition Examination Survey I: Epidemiologic Follow-up Study (NHEFS). The NHEFS is a 20-year panel study of adult Americans. The subjects studied were first interviewed during 1971-1975 and re-interviewed in 1982-1984, 1987, and 1992 (N=6,913 at baseline). Information on hospital episodes is drawn from hospital facility records over the 20 years. A prospective research design is used to evaluate health trajectories and hospitalization among Black and White men and women. Specific aims are to: 1. To examine differences in the patterns of hospitalization for Black and White adults; outcomes include risk of hospitalization, length of stay, rehospitalization, and potentially avoidable hospitalizations. 2. To model the relationship between hospitalization and health trajectories over 20 years among Black and White subjects while accounting for attrition with selection bias models (i.e., Heckman models). 3. To assess the relative influence of socioeconomic and health status, health behavior, and hospitalization experiences on mortality for Black and White adults. Special attention is given to differences in discharge instability and hospitalization during the last year of life. The data for the proposed analyses provide the scientific community with hitherto unavailable information for understanding health trajectories and hospitalization in adulthood and later life among Black and White adults.

Grant: 1R01AG023141-01
Program Director: SHRESTHA, LAURA B.
Principal Investigator: FIENBERG, STEPHEN PHD
Title: Modeling Longitudinal Disability Survey Data
Institution: CARNEGIE-MELLON UNIVERSITY PITTSBURGH, PA
Project Period: 2003/09/30-2006/08/31

DESCRIPTION (provided by applicant): Survey data on disability among the elderly are available from several sources, most prominently the National Long Term Care Survey (NLTCS). The NLTCS began in 1982 and now extends over five waves through 1999, making it a rich source of information on possible changes in disability over time. But these data pose challenges for both statistical modeling and the protection of confidentiality of the information provided by survey respondents, especially when the data for individuals are linked across waves. Most statistical approaches used to analyze NLTCS data are based on disability scales that cannot account for the complexity of disability manifestations. Attempts to deal with such complexity include traditional multivariate methods for both discrete and continuous data, and approaches based on the grade of membership model. These methods typically require either making heroic simplifying assumptions or need to be adapted. This project aims to develop new statistical models and approaches for the analysis of such survey data, including the role of sample weights in the use of these models. It also proposes to take a fresh look at the risk of inadvertent disclosure of information on NLTCS respondents and to develop new approaches to protect against disclosure while preserving access to the maximal amount of information in the data required for their proper analysis using the new models and methods.

Grant: 5R01AG017916-04
Program Director: ELIAS, JEFFREY W.
Principal Investigator: FINGERMAN, KAREN L. PHD
Title: PROBLEMS BETWEEN PARENTS AND OFFSPRING IN ADULTHOOD
Institution: PURDUE UNIVERSITY WEST LAFAYETTE WEST LAFAYETTE, IN
Project Period: 2001/09/30-2004/08/31

DESCRIPTION (provided by applicant): In an era of increasing mobility and high divorce rates, the parent/offspring tie has become one of the longest lasting and most important relationships in adults' lives. Although we know a great deal about positive qualities of this tie, we know surprisingly little about difficulties between parents and offspring after offspring enter young adulthood and before parents incur physical declines at the end of life. The proposed study looks at how parents and adult offspring perceive and handle problems in their relationships. We explore the ways in which age, gender, and relationship status (parent vs. offspring) are associated with differences in negative features of parent/adult offspring ties. Specifically, this study advances the field by looking at the psychosocial correlates underlying these marker variables. Participants will be 150 triads of offspring ages 24 to 44, their mothers, and their fathers ($n = 450$), residing within 50 miles of one another. Individual interviews will be conducted with each party, and offspring will participate in dyadic interviews with their mothers and fathers separately. Open-ended and forced-choice questions will provide information about parents' and offspring's perceptions of difficulties in their relationship and how they react to these difficulties. Dyadic interviews conducted between offspring and their mothers and their fathers will supply observational data concerning parents' and offspring's reactions to problems in their relationships. In addition, 150 offspring who reside at a distance from their parents will provide information about problems in their relationships. It is hypothesized that differences in beliefs about the relationship and variation in investment in the relationship will explain age, gender, and status differences in perceptions of problems and reactions to problems. This research will provide a more comprehensive portrait of the parent/offspring relationship across adulthood. Furthermore, findings from this study will be of use to psychologists, social workers, and family practitioners who work with parents and adult offspring who encounter relationship problems.

Grant: 3R01AG018037-04S1
Program Director: STAHL, SIDNEY M.
Principal Investigator: FREDMAN, LISA PHD
Title: HEALTH DECLINE IN AGED CAREGIVERS: EPIDEMIOLOGIC STUDY
Institution: BOSTON UNIVERSITY MEDICAL CAMPUS BOSTON, MA
Project Period: 1999/09/30-2004/08/31

Informal caregivers experience high rates of burden and psychological distress, but whether caregiving has adverse effects on the caregiver's physical health is less well-established. The proposed study aims to a) compare change in physical health between caregivers and non-caregivers over a 2-year period; and b) compare the effects of factors directly associated with caregiving (e.g, hours/day in caregiving activities) and indirectly associated with caregiving (e.g., use of psychotropic medications) on change in physical health over a 2-year period. This study will be conducted as an ancillary study to the Study of Osteoporotic Fractures (SOF), a 4-site prospective study of osteoporosis and related conditions among elderly community-dwelling women. A screening questionnaire will be administered to all eligible SOF participants, including the newly-recruited African-American cohort, at the 6th SOF clinic visit to identify a sample of 600 SOF participants who are informal caregivers (including an estimated 100 African-American caregivers) and 600 non-caregivers, matched on age-, SOF site-, and race. This study will collect data from caregivers and non-caregivers through interviewer-administered questionnaires in face-to-face interviews at baseline and at 1- and 2-years post-baseline. These data will cover caregiving activities, physical effort of caregiving, depressive symptoms, stress, coping, stress-related behaviors, and weight and ADL/IADL functioning. These data will be linked to the 6th SOF clinic data on physical and functional health, cognitive status, weight, physical activities, sleep disturbance, and neuromuscular functioning, and SOF follow-up data on falls, fractures, health care use, and mortality. Longitudinal analyses will test hypotheses that caregivers have a higher rate of health decline than non-caregivers (e.g., change in ADLs/IADLs, falls, fractures, weight change) and hypotheses on the associations among caregiving activities, stress-related behaviors and health decline among white versus African-American caregivers. This study will benefit from its prospective design, its link to a large multi-site population-based cohort of elderly women, and a wealth of standardized self-report, clinical, and functional measures on physical health. The number of elderly caregivers in the United States is growing; this group is at highest risk of adverse health effects of caregiving. These study results will provide epidemiologic evidence of adverse physical health outcomes of caregiving, and implications for detection and prevention of health decline in caregivers.

Grant: 5R01AG018037-05
Program Director: STAHL, SIDNEY M.
Principal Investigator: FREDMAN, LISA PHD
Title: HEALTH DECLINE IN AGED CAREGIVERS: EPIDEMIOLOGIC STUDY
Institution: BOSTON UNIVERSITY MEDICAL CAMPUS BOSTON, MA
Project Period: 1999/09/30-2004/08/31

Informal caregivers experience high rates of burden and psychological distress, but whether caregiving has adverse effects on the caregiver's physical health is less well-established. The proposed study aims to a) compare change in physical health between caregivers and non-caregivers over a 2-year period; and b) compare the effects of factors directly associated with caregiving (e.g, hours/day in caregiving activities) and indirectly associated with caregiving (e.g., use of psychotropic medications) on change in physical health over a 2-year period. This study will be conducted as an ancillary study to the Study of Osteoporotic Fractures (SOF), a 4-site prospective study of osteoporosis and related conditions among elderly community-dwelling women. A screening questionnaire will be administered to all eligible SOF participants, including the newly-recruited African-American cohort, at the 6th SOF clinic visit to identify a sample of 600 SOF participants who are informal caregivers (including an estimated 100 African-American caregivers) and 600 non-caregivers, matched on age-, SOF site-, and race. This study will collect data from caregivers and non-caregivers through interviewer-administered questionnaires in face-to-face interviews at baseline and at 1- and 2-years post-baseline. These data will cover caregiving activities, physical effort of caregiving, depressive symptoms, stress, coping, stress-related behaviors, and weight and ADL/IADL functioning. These data will be linked to the 6th SOF clinic data on physical and functional health, cognitive status, weight, physical activities, sleep disturbance, and neuromuscular functioning, and SOF follow-up data on falls, fractures, health care use, and mortality. Longitudinal analyses will test hypotheses that caregivers have a higher rate of health decline than non-caregivers (e.g., change in ADLs/IADLs, falls, fractures, weight change) and hypotheses on the associations among caregiving activities, stress-related behaviors and health decline among white versus African-American caregivers. This study will benefit from its prospective design, its link to a large multi-site population-based cohort of elderly women, and a wealth of standardized self-report, clinical, and functional measures on physical health. The number of elderly caregivers in the United States is growing; this group is at highest risk of adverse health effects of caregiving. These study results will provide epidemiologic evidence of adverse physical health outcomes of caregiving, and implications for detection and prevention of health decline in caregivers.

Grant: 1R01AG021516-01
Program Director: SHRESTHA, LAURA B.
Principal Investigator: FREEDMAN, VICKI A PHD
Title: Late-life Health Trends: Disparities and Explanations
Institution: POLISHER RESEARCH INSTITUTE NORTH WALES, PA
Project Period: 2003/05/01-2007/04/30

DESCRIPTION (provided by applicant): Over the past decade, a consensus has emerged that disability prevalence rates have declined among older Americans. Several studies suggest that the prevalence of severe cognitive functioning also may be declining among older Americans. If such declines continue into the future, their effect on the nation's health and economic well-being could be incredibly far-reaching, with potentially more older Americans able to work longer and relatively fewer needing medical and long-term care. Yet the consequences of recent trends in late-life health remain open to debate in part because the direction of future trends remains illusive. Whether these improvements have been experienced widely is also still unclear and the explanations for the declines remain a scientific mystery. The goal of this project is to update and expand our understanding of trends in late-life health. We define health broadly to include chronic conditions and impairments; physical, cognitive, and sensory limitations; and disability. Drawing upon new data from the National Health Interview Survey (NHIS), the Health and Retirement Study (HRS) and its sister survey the Asset and Health Dynamics of the Oldest Old (AHEAD) study, and the Panel Study of Income Dynamics (PSID), the latter a completely untapped source on this topic, we will: Aim I. Update trends in late-life health into the 21st Century. We will focus primarily on trends in the prevalence of late-life health measures but where possible also investigate the underlying incidence, recovery, and mortality processes driving prevalence trends. Aim II. Investigate the extent of disparities in health trends by race/ethnicity, sex, marital status, nativity, and socioeconomic status. By answering whether the gaps in prevalence are narrowing or widening, we will provide insight into future directions in overall trends. Aim III. Investigate the role of experiences earlier in life as a possible explanation for overall trends. In particular, we will focus on changes in early and midlife factors as possible influences driving improvements in late-life health.

Grant: 5R01AG019769-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: FRIED, TERRI R. BA
Title: Treatment Goals at the End of Life
Institution: YALE UNIVERSITY NEW HAVEN, CT
Project Period: 2002/05/15-2005/04/30

DESCRIPTION (provided by applicant): Meeting the preferences of terminally ill persons is essential to the provision of quality end-of-life care. Although many intervention studies have been based on the assumption that terminally ill patients desire less technologically intensive care, this assumption has not been well studied. As the first longitudinal study of the treatment preferences of older terminally ill persons, the overall objective of this study is to examine changes in the preferences of both patients and their families across a spectrum of diseases as the patient's illness progresses. The primary aim is to determine the effect of primary diagnosis, health status, and healthcare utilization on the preferences of patients and their families. The proposed study will involve 226 terminally ill older persons and a family member. They will be interviewed in their homes every four months if medically stable, and as frequently as every month if the illness is progressing. In contrast to previous studies, which have primarily measured preferences in terms of specific treatment preferences, this study will use patient-centered measures of preferences. Derived from qualitative research, these reliable and valid instruments measure preference in terms of treatment goals. The relationship between disease diagnosis, health status (functional status, symptoms, self-rated health), healthcare utilization (hospitalization, intensive care unit admissions, nursing home admissions), and understanding of the illness prognosis and preferences will be examined using longitudinal repeated measures analysis. The understanding of patients'and family members'treatment goals over the course of a terminal illness is essential to the development of new systems of care for terminally ill patients. Furthermore, the characterization of patients'preferences in terms of their treatment goals instead of their specific treatment preferences provides the basis for future interventions designed to improve physician-patient communication. This study utilizes a unique cohort of community-dwelling older persons identified as having a terminal illness by objective criteria.

Grant: 3R01AG019769-02S1
Program Director: STAHL, SIDNEY M.
Principal Investigator: FRIED, TERRI R. BA
Title: Treatment Goals at the End of Life
Institution: YALE UNIVERSITY NEW HAVEN, CT
Project Period: 2002/05/15-2005/04/30

DESCRIPTION (provided by applicant): Meeting the preferences of terminally ill persons is essential to the provision of quality end-of-life care. Although many intervention studies have been based on the assumption that terminally ill patients desire less technologically intensive care, this assumption has not been well studied. As the first longitudinal study of the treatment preferences of older terminally ill persons, the overall objective of this study is to examine changes in the preferences of both patients and their families across a spectrum of diseases as the patient's illness progresses. The primary aim is to determine the effect of primary diagnosis, health status, and healthcare utilization on the preferences of patients and their families. The proposed study will involve 226 terminally ill older persons and a family member. They will be interviewed in their homes every four months if medically stable, and as frequently as every month if the illness is progressing. In contrast to previous studies, which have primarily measured preferences in terms of specific treatment preferences, this study will use patient-centered measures of preferences. Derived from qualitative research, these reliable and valid instruments measure preference in terms of treatment goals. The relationship between disease diagnosis, health status (functional status, symptoms, self-rated health), healthcare utilization (hospitalization, intensive care unit admissions, nursing home admissions), and understanding of the illness prognosis and preferences will be examined using longitudinal repeated measures analysis. The understanding of patients'and family members'treatment goals over the course of a terminal illness is essential to the development of new systems of care for terminally ill patients. Furthermore, the characterization of patients'preferences in terms of their treatment goals instead of their specific treatment preferences provides the basis for future interventions designed to improve physician-patient communication. This study utilizes a unique cohort of community-dwelling older persons identified as having a terminal illness by objective criteria.

Grant: 5R01AG008825-11
Program Director: ELIAS, JEFFREY W.
Principal Investigator: FRIEDMAN, HOWARD S MD
Title: PREDICTORS OF HEALTH AND LONGEVITY
Institution: UNIVERSITY OF CALIFORNIA RIVERSIDE RIVERSIDE, CA
Project Period: 1990/08/01-2005/01/31

This competing continuation project will employ the 7-decade longitudinal Terman data to examine relationships between theoretically key behavioral and psychosocial predictors and longevity/cause of death/healthy aging. This interdisciplinary research will test hypothesized relations involving the mechanisms of physical activity patterns, risk-taking, religiosity and contentment, changes in social integration across time, explanatory style and resilience, gender diagnostics, substance use, and facets of personality as they predict health many years later. The design is an archival prospective cohort study, using statistical survival analyses and related regression analyses. Because of the long-term nature and richness of the data, this project can compare competing models, can examine long-term effects and time-related changes, and can compare major causes of death. This is consistent with calls for intensive studies of individual differences in behavior patterns, health and disease. Much of the raw data come from the archive begun in 1921 by L. Terman, plus extensive additional data already collected by this project on date of death, cause of death, smoking, and various indexes of personality and social stability. The subjects are 856 men and 672 women followed from their childhood in the 1920's until the present, the longest continuous cohort study ever conducted. Following up on the ongoing research, which uncovered links between major psychosocial patterns earlier in life and subsequent premature death in middle and old age, the present project will employ reliable behavioral patterns and psychosocial indices to compare models containing these and related later-life psychosocial stresses and resources. This project thus aims to provide hard-to-obtain information relevant to understanding the influence of these social, individual, and behavioral factors on longevity and cause of death across the life span.

Grant: 5R01AG019380-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: FRIEDMAN, ROBERT H AB
Title: Telecom Technology to Improve Adherence to Medication
Institution: BOSTON MEDICAL CENTER BOSTON, MA
Project Period: 2002/07/15-2007/06/30

DESCRIPTION (provided by investigator): The aim of the study is to evaluate the utility of behavior theory-directed computer-based telecommunications technology to improve medication regimen adherence in adult patients with chronic disease. To this end, we will enhance an existing telecommunications system Telephone-Linked Care for Medication Adherence (TLC-MED) that applies constructs from Social Cognitive Theory (SCT) to monitor, educate and counsel adults with chronic disease through weekly automated telephone conversations. The system also sends periodic reports to their physicians to assist in patient care. In the proposed study, we will enhance the existing version of TLC-MED, which was shown to be effective in a randomized clinical trial of patients with hypertension, in the following manner. We will more fully apply four SCT constructs (self-efficacy, outcome expectations, behavioral capability, and reinforcement) in the TLC-MED conversations and use electronic medication monitoring which is more accurate than patient self-report. We will combine this enhanced version of TLC-MED with TLC chronic disease monitoring modules for four common chronic diseases (hypertension, coronary heart disease, chronic obstructive lung disease, and diabetes mellitus) to create an integrated TLC-MED chronic disease system. Because of the increasing prevalence and importance of delivering health care services to patients who have more than one chronic disease, we will study TLC-MED in patients who have at least two of these four common chronic diseases. Because of societal needs to provide health care services to disadvantaged populations, we will study TLC-MED in two clinical settings with large numbers of disadvantaged patients, both African-American and Caucasian. TLC-MED will be evaluated in a two-arm randomized clinical trial of 440 adult, primary care patients. All subjects will have an educational session to promote medication regimen adherence. In addition, TLC-MED subjects will use the system weekly for 6 months. All subjects will be evaluated for outcomes at baseline, 6 months, and 15 months (9 months post-intervention). The principal outcomes will be (1) overall medication regimen adherence, (2) medication regimen adherence for each of the four targeted diseases and a non-targeted chronic disease, (3) intervening behavioral variables (the four SCT constructs), and (4) distal clinical variables (general and disease-specific). We will also explore how disease co-morbidity affects medication adherence and the TLC-MED intervention effects.

Grant: 5R01AG015815-04
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: FRIES, JAMES F MD INTERNAL MED:INTERNAL
MEDICINE-UNSPEC
Title: EXERCISE, DISABILITY, OSTEOARTHRITIS AND COSTS
Institution: STANFORD UNIVERSITY STANFORD, CA
Project Period: 2000/09/30-2005/08/31

DESCRIPTION: (Adapted from Investigator's Abstract) Physical disability is the most prevalent major health problem of aging populations, and the associated needs for medical services are large. Yet, while longitudinal studies of risk factors for cardiovascular disease have identified major modifiable risk factors and have led to strategies for reduction of morbidity and mortality, such studies in musculoskeletal disease remain in their infancy. This 20 year longitudinal study of 961 individuals studied from an average age of 58 in 1984 and due to reach age 78 in 2004 will (1) identify risk factors for physical disability, radiologic osteoarthritis, and associated use of medical services, (2) assess changes in exercise and other risk factors in terms of cumulative lifetime disability and cumulative health care utilization over time, and (3) establish risk factor models for osteoporotic fractures. The role of physical exercise is particularly emphasized. The investigators will assess development of disability, progression of disability, and risk factor models in minority as compared with predominately white non-Hispanic populations. The investigators state that this project is enabled by extensive previous work and a unique data set. They point out that the application extends their investigations into important new questions of cumulative morbidity and costs, analysis of costs and benefits, long-term disability and cost outcomes, risk factors in minority populations, and effects of changes in risk factor status upon disability, cost, and mortality outcomes. The application proposes to continue data acquisition into the eighth and ninth decades, the age when this cohort will experience the greatest degrees of disability, decline in health, and use of health services. The investigators state that the results will suggest public policy initiatives directed at decreasing lifetime morbidity and medical care costs through preventive mechanisms which reduce modifiable risk factors. They further state that the overall project objective is to understand how improvements in exercise and other risk factor status may retard functional decline and reduce the need for medical care.

Grant: 5R01AG017967-03
Program Director: ELIAS, JEFFREY W.
Principal Investigator: GANONG, LAWRENCE H PHD
Title: Obligations to Older Kin after Divorce and Remarriage
Institution: UNIVERSITY OF MISSOURI COLUMBIA COLUMBIA, MO
Project Period: 2001/09/01-2005/07/31

Obligations to Older Kin after Divorce and Remarriage The rising costs of health care and the efforts of the federal and local governments to cut back on services have increased the importance of understanding normative beliefs about family obligations to dependent older kin. Normative beliefs about what should be done are important to understand because they help individuals define and negotiate their responsibilities, they serve as criteria to measure how well individuals are functioning as family members, and they provide a framework that people use to justify and explain their conduct to others. What people do in relationships is based partly on felt responsibilities and partly on normative expectations about what should be done. The overall purposes of this project are to examine normative and felt obligations to older divorced parents and stepparents and to assess the effects of selected contextual factors on normative and felt obligations. The factors examined are type of relationships (genetic or step), relationship quality, resource availability, acuity of need, prior commitments, prior patterns of exchanges between kin, and sex of both older and younger adults. The project consists of six telephone surveys that will examine both the long-term effects of parental divorce and remarriage and the effects of later-life divorce and remarriage on normative and felt obligations to older parents and stepparents. All studies will use the same design. A national sample of adults will be obtained using random digit dialing. Multiple-segment vignettes will be used to assess normative and felt obligations. Each vignette is divided into 2-5 paragraphs. In each paragraph an older family member needs help (e.g., physical care, financial help). The families experience various transitions as the stories develop. After each paragraph respondents indicate what they think specific characters should do about helping or not helping older family members and they offer the rationale for their beliefs. Respondents will be randomly presented with one of the versions of vignettes in the factorial survey technique, just as in experimental research. Responses regarding what family members should do will be analyzed with multiple regression. Rationale will be content analyzed. The findings of this project will be used to test and refine a model of normative intergenerational obligations and to develop a model of felt obligations after divorce and remarriage.

Grant: 5R01AG013687-05
Program Director: STAHL, SIDNEY M.
Principal Investigator: GITLIN, LAURA N MA
Title: ENHANCING FUNCTION OF FRAIL ELDERLY BY MODIFYING THE HOME
Institution: THOMAS JEFFERSON UNIVERSITY PHILADELPHIA, PA
Project Period: 1999/06/01-2004/05/31

Functional disability is a major adverse outcome of age-related chronic diseases. It is associated with diminished capacity to perform activities of daily living, increased fear and risk of falling, depression, higher service utilization and health care costs. The proposed intervention study is a two-group (intervention vs. control) randomized trial which tests the effectiveness of a home-based, client-tailored, environmental modification program that targets functionally vulnerable older adults. This theoretically-guided intervention is based on principles from a competence-environmental press framework and personal control theory. It involves instruction in a combination of behavioral and environmental strategies that provide primary mechanisms of control over the environment and the ability to perform basic and instrumental activities of daily living. Strategies include use of assistive devices and home alterations, energy conservation, proper body mechanics, safe fall and fall recovery methods, and task breakdown techniques that are designed to minimize the impact of functional limitations and afford personal efficacy. Strategies are selected based on assessment, personal goals and environmental and performance risk factors. The program involves a 6-month active phase that consists of 5 home visits and 1 telephone contact by a health professional in which strategies are implemented. A 6-month maintenance phase follows involving 1 home visit and 3 telephone contacts to reinforce and refine environmental strategy use. The study will enroll 318 community-living elders 70 + years of age from the waiting lists of the Philadelphia Corporation for Aging, the Area Agency on Aging. Subjects will be stratified by gender and living arrangement (alone vs. live with other) and randomized to either a usual care control group or the experimental group. All participants will be assessed at baseline (T1), 6 months (T2) and 12 months (T3) post-baseline. The specific study aims are to: 1) Test the immediate effect (T1-T2) of intervention on functional status, self-efficacy and home safety; 2) Test the maintenance effect (T2-T3) of intervention on functional status, self-efficacy and home safety; 3) Evaluate the cost-effectiveness of the intervention or the net cost of intervention to improvement of functional status and reduction of health and human service utilization. A secondary aim is to evaluate the impact of intervention on rate of falls and depressive symptomatology. Another secondary aim is to explore the differential impact of intervention and whether the above outcomes are moderated by gender, living arrangement, and baseline efficacy beliefs and depression. Last, we seek to describe the intervention process and specifically, the therapeutic techniques that are used, the staying power of each environmental strategy and the process of developing a therapeutic relationship using a client-centered approach.

Grant: 5R01AG022254-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: GITLIN, LAURA N MA
Title: Reducing Family Caregiver Upset with Disruptive Behavior
Institution: THOMAS JEFFERSON UNIVERSITY PHILADELPHIA, PA
Project Period: 2002/09/30-2007/08/31

DESCRIPTION (provided by applicant): This application is in response to the RFA NR-02-001 "Informal Caregiving Research for Chronic Conditions." It proposes a randomized control trial to test the effectiveness of a targeted intervention to reduce family caregiver upset with disruptive behaviors and burden, and frequency of behavioral occurrences in persons with Alzheimer's disease and related disorders (ADRD). The study targets 272 highly stressed racially diverse family caregivers providing in-home care to persons at moderate stage dementia, a point in the disease in which behavioral disturbances typically occur and caregiver stress significantly increases. The in-home intervention we plan to test is theory-driven and multidisciplinary and combines empirical evidence with knowledge of best clinical practice. To enhance its clinical applicability, the intervention is designed to be reproducible and its components reimbursable under current Medicare guidelines. The intervention provides families with the requisite knowledge and skills to control their own stress and identify, manage and reduce both the internal (e.g., medical causes) and external (e.g., environmental) factors that may contribute to disruptive behavior in the home. The first intervention component involves a home visit from an advanced practice nurse who will provide education to caregivers about dementia and disruptive behaviors, and screen for and coordinate treatment of underlying medical conditions (e.g., infection) that may contribute to the behavioral disturbance in the person with ADRD. Regardless of medical outcome, the next intervention component involves home visits and telephone contacts by an occupational therapist who will provide in-home caregiver training in (1) stress reduction, (2) problem solving to identify antecedent environmental conditions that provoke behaviors, (3) communication, task and environmental simplification techniques to prevent and manage disruptive behaviors; and (4) environmental modifications (e.g., placement of visual cues, de-cluttering, assistive devices) to minimize excess stimulation and disorientation contributing to target behaviors. The intervention will be tested using a randomized two-group design in which 272 caregivers will be assigned to 6-months of intervention or a usual care control group, and evaluated at baseline, 4 and 6-months. The specific aims are to (1) test immediate intervention effectiveness (4-months) to reduce caregiver upset with targeted disruptive behaviors (primary outcome); (2) test immediate intervention effectiveness (4-months) to reduce caregiver burden (secondary outcome); (3) test immediate intervention effectiveness (4-months) to reduce occurrence of targeted disruptive behaviors in persons with dementia (secondary outcome); (4) test the intervention maintenance effect (6-months) on caregiver upset and burden and targeted disruptive behaviors; and (5) assess the cost and cost effectiveness of the intervention. We also propose two exploratory aims. We will evaluate the mechanisms of action, or the pathways by which treatment gains are obtained, by examining whether improvement in quality of caregiving through skill acquisition (e.g., self-efficacy, caregiver use of positive communication and task simplification techniques), mediates treatment effectiveness. Second, given that previous research suggests that caregiver characteristics may moderate caregiving experiences and treatment outcomes, we plan to evaluate whether there is a differential treatment effect based on the caregiver's gender, race and relationship to the ADRD patient.

Grant: 5R01AG020048-06
Program Director: ELIAS, JEFFREY W.
Principal Investigator: GOLDBERG, LEWIS R PHD
Title: Personality and Health-- A Longitudinal Study
Institution: OREGON RESEARCH INSTITUTE EUGENE, OR
Project Period: 1997/09/20-2007/08/31

DESCRIPTION (provided by applicant): The broad objectives of this project are to test the models and mechanisms by which childhood personality traits predict adult health-related behaviors, health status and, eventually, mortality. The specific aims are to test three increasingly complex versions of a health-behavior model in which personality traits influence health status through health behaviors, and to evaluate any cultural influences on these models. The participants comprise a cohort of middle-aged adults for whom unique and irreplaceable teacher personality assessments were obtained about 40 years ago. Specifically, 1,770 members of the original population of Hawaiian schoolchildren have been located and 1,055 have been recruited to participate in this longitudinal study of personality and health. The recruited sample is representative of the original population in terms of personality attributes and gender. Over the next five years, information about the participants' personality traits, health behaviors, and health outcomes will be obtained. The personality measures will be based on several different theoretical perspectives including the five-factor framework. Health behaviors will include dietary practices, physical activity levels, and tobacco and alcohol usage. Health outcomes will include objectively assessed physical fitness and flexibility, obesity, and cholesterol level. Assessment methods will include self-reports, reports from knowledgeable others, observer ratings, physical/medical examinations, and laboratory tests. Frequency and appraisals of stressful life events, coping strategies, and constructs from the Theory of Planned Behavior will also be assessed to evaluate the more complex versions of the proposed health-behavior model. The effects on these models of cultural variables, socioeconomic status, and gender will be examined. The cross-sectional and longitudinal influences of personality traits will be evaluated by bivariate and multivariate linear models and structural equation modeling. This project will create a longitudinal data archive that will be a treasure chest for the scientific community for years to come.

Grant: 1R01AG022351-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: GOLDMAN, DANA P PHD
Title: INVESTIGATION OF THE VIATICAL SETTLEMENTS MARKET
Institution: RAND CORPORATION SANTA MONICA, CA
Project Period: 2003/09/15-2006/08/31

People near the end of life such as the frail elderly or terminally ill often desire to sell non-liquid assets to finance current consumption. This is especially true for those with a life-threatening illness that requires expensive drug treatments. Such people are increasingly using a financial vehicle called a viatical settlement. These settlements, which first arose in the context of HIV, allow policyholders to convert their previously non-liquid life insurance policies into cash at a discount to the policies' face value. (The discount depends on life expectancy.) These transactions are becoming increasingly common among the elderly with non-HIV disease. This project will: (1) Develop an economic theory of how prices are determined; (2) Describe the viatical settlements market in states with different regulatory environments; (3) Empirically estimate economic models of market behavior using actual transaction data; and (4) Simulate the welfare implications of price regulation and changes in market structure. A unique database of actual viatical settlement transactions will be compiled using annual reports of viatical companies filed with insurance regulators in 26 states during the period 1995 to 2001. The empirical analysis will depend on an economic theory of how prices are determined in the viatical settlements market. A key implication of the theory is that prices in this market may change either due to changes in the market power of firms in this market or due to changes in the market's expectations about medical breakthroughs that increase the longevity of the terminally ill or elderly. Price changes due to changes in market power are welfare reducing, whereas changes due to increased optimism about medical advances do not entail a welfare loss as the lower price just reflects the lower actuarial value of the life insurance (as one expects the policyholder will die later). The economic models will be estimated using the transaction data to determine whether recent price changes reflect increases in market power or increased market optimism about medical breakthroughs. This project will also estimate the magnitude of welfare gain (or loss) due to imposition of price regulations mandating that consumers receive at least a certain percentage of the face value of a life insurance policy. Price regulations might increase consumer welfare by increasing the prices received by consumers, but if these price floors are set too high, they might do more harm by blocking mutually beneficial life insurance sales. We will use a dynamic micro-simulation model to simulate the welfare implications of different price regulations. We will calibrate this model using our transaction data and a nationally representative sample of HIV+ adults with life insurance.

Grant: 5R01AG016790-05
Program Director: SHRESTHA, LAURA B.
Principal Investigator: GOLDMAN, NOREEN DSC
Title: BIODEMOGRAPHY--HEALTH, SOCIAL FACTORS & LIFE CHALLENGE
Institution: PRINCETON UNIVERSITY PRINCETON, NJ
Project Period: 1999/07/01-2004/06/30

Demographic processes, the social environment, and life challenge are intimately interlocked with functional status and illness. The social environment, encompassing position in social hierarchy as well as linkages within social networks and support systems, affects exposure to challenge and mediates its effects. This biodemographic investigation has two primary goals. First, we propose to elaborate the relationship between life challenge and health, exploring how the social environment affects that relationship. Specifically we will: 1) Identify challenges that are most strongly associated with, and discriminate best between, the preservation and deterioration of health; 2) Examine both the costs and benefits to health of social connection, support networks, instrumental assistance and emotional support, and social activity. We will identify the components that are most important for the maintenance of mental and physical functioning and for mediating the effects of challenge on health outcomes; and 3) Explore the effects of cumulative advantage and cumulative adversity on health taking into account both timing and severity of life events. Second, we propose to explore how our understanding of the relationships among life challenge, the social environment, and health can be enhanced by incorporating biological markers of health and stress. We will: 1) Investigate the extent to which biological markers of stress and chronic illness are related to reports of life events; 2) Examine the associations between the biological markers and data from physicians' examinations and self-reported health status, and explore their links to survival based on data from death certificates and the household registry; and 3) Explore the extent to which the biological markers can explicate the relations among the social environment, challenge, and health. We will use unusually rich, population-based data from a longitudinal study of the elderly. These data have been collected periodically since 1989 and comprise detailed retrospective and current status information on health and on social, economic, and demographic characteristics. We propose to collect biological markers of health and of life challenge from a subset of 1000 of the participants based on physical exams, and assays of blood and urine specimens. Our analytical strategy uses two multivariate procedures: 1) generalized linear models (especially those for limited dependent variables); and 2) grade of membership models. Our use of both techniques will exploit their complementary strengths for answering our research questions.

Grant: 5R01AG015110-06
Program Director: SHRESTHA, LAURA B.
Principal Investigator: GOLDSTEIN, MARY K MD
Title: Disutility of Functional Limitations in the Elderly
Institution: STANFORD UNIVERSITY STANFORD, CA
Project Period: 1997/09/30-2006/06/30

DESCRIPTION (provided by applicant): The overriding goal of this project is to assess the cost-effectiveness of health care interventions that improve or prevent deterioration in health related quality of life of the elderly. The absence of well-accepted, validated methods to measure the benefits of improved quality of life often means that such benefits are either undervalued or ignored altogether. We are developing methods to greatly improve the measurement of quality of life changes resulting from the prevention or mitigation of functional limitations. This step may help ensure that health policies place proper value on health interventions that improve the independent functioning of elderly Americans. We plan to use the multimedia preference assessment (utility) software (PALS), developed specifically for computer-inexperienced elders in the current project, ROI AG15110, to estimate the utility for health states of functional impairment of individuals, both with and without functional limitation. We will interview approximately 600 older adults from a random sample stratified by age into two groups: 65 to 74 years, and 75 years or older. We will re-interview approximately 300 of the individuals at one year and two years after their initial interview. We will estimate the impact of an individual's own dependency in Activities of Daily Living (ADLs) on his or her utility rating for health states of functional dependency. In the longitudinal study, we will define the stability of utilities for health states over time, comparing individuals who do with those who do not themselves develop dependencies during that time. We will assess the impact of emotional and general well-being on utility, both between groups and within individuals over time. Using covariates of age, gender, race/ethnicity, and health status, in addition to the individual's ADL status and emotional well-being, we will estimate a prediction model for utility for health states of functional dependency. Finally, by performing cost-effectiveness evaluation of a geriatric evaluation and management (GEM) intervention, we will illustrate the differences in estimates of cost-effectiveness that can be seen using each of several groups as sources of utility data. The preference assessment methods we are developing will make it possible to conduct formal evaluations of treatments whose primary goal is rehabilitation or preservation of function rather than life prolongation. The longitudinal data from individuals who develop ADL dependencies will deepen our understanding of the impact of functional impairments on older adults.

Grant: 5R01AG015301-15
Program Director: STAHL, SIDNEY M.
Principal Investigator: GRANT, IGOR MD PSYCHIATRY:PSYCHIATRY-UNSPEC
Title: Alzheimer Caregiver Coping: Mental and Physical Health
Institution: UNIVERSITY OF CALIFORNIA SAN DIEGO LA JOLLA, CA
Project Period: 1997/09/30-2006/08/31

The experiences of elderly caregivers of Alzheimer relatives (CG) can be viewed as a model of chronic human stress in aging. Our work in the past funding cycle has been guided by the notion that such stress is accompanied by increased sympathoadrenalmedullary (SAM) activation whose cardiovascular and molecular responses may be amplified by superimposed stressors such as excessive care demands relative to respite received ("vulnerable CG"). The results to date indicate heightened basal circulating epinephrine (E) in vulnerable CG, altered L-selectin cell adhesion molecule (CAM) expression, down-regulation of beta-adrenergic receptors of lymphocytes, but no systematic changes in heart rate or blood pressure variability. Vulnerable CG who received a two week respite intervention demonstrated lessened circulating E in response to stressors compared to wait-listed CG, but there were no systematic treatment-related changes in other variables. Pilot data revealed: 1) increased expression of procoagulation factors (especially D-Dimer) which correlated with amount of sleep disturbance and level of catecholamines; 2) Vulnerable CG had less total sleep time and more awakenings than nonvulnerable CG. In the proposed research we wish to refine our understanding of the molecular changes underlying chronic and acute stress in elderly caregiving. The basic theory is that the chronic stress of caregiving yields a state of relative SAM arousal reflected in greater resting and stressor-related releases of catecholamines. As outcome variables of chronic and acute stressors related to caregiving, we shall focus on coagulation factors and cellular adhesion molecules, each of which has been associated with heightened risk of cardiovascular morbidity and mortality. The general hypothesis is that elderly caregivers, versus noncaregiving controls (NC) will have greater SAM arousal and greater expression of coagulation and adhesion molecules. It is posited further that those caregivers who have background medical risks (history of cardiovascular disease or hypertension), and who experienced superimposed stressors, such as excessive caregiving demands, or other negative life events, will be selectively vulnerable to these physiological changes. Disturbed sleep environment is posited to be one of the pathways whereby caregiving stressors are translated into SAM arousal and molecular changes. The study design calls for recruitment of 120 elderly caregivers (CG) and 60 noncaregiving controls (NC). Laboratory-derived speech stressor tasks will be used to probe differences in SAM responsivity to speech stressors between CG and NC, as well as CG at several levels of "mismatch" between caregiving demand and respite received. At-home polysomnography and actigraphy will monitor sleep disruption, sleep disorders (e.g., sleep apnea), and circadian activity variation. In the longitudinal phase, subjects will be re-evaluated annually to determine if hypothesized recovery of SAM arousability occurs in those CG who have placed their spouse, or whose spouse has died. The results of this research should bring us closer to understanding the physiological and molecular mechanisms underlying increased morbidity in elderly persons under chronic stress.

Grant: 1R01AG021515-01
Program Director: STAHL, SIDNEY M.
Principal Investigator: HAUPTMAN, PAUL J MD
Title: Decision Making in End-Stage Heart Failure
Institution: ST. LOUIS UNIVERSITY ST LOUIS, MO
Project Period: 2003/06/15-2007/05/31

DESCRIPTION (provided by investigator): The investigator, Paul J. Hauptman MD, proposes a program of research focused on congestive heart failure in its advanced stages. This is a disease of increasing prevalence, especially in the elderly, accounting for high morbidity and mortality. However, little is known about actual and self-reported practice. The research program is in two complementary parts. The first is designed to examine the use of chronic continuous outpatient intravenous infusions of inotropic drugs, a therapy associated with high costs, unproven clinical efficacy and the potential to shorten survival while achieving palliation. The investigator will use administrative and clinical data from several Medicare databases including the records of a Durable Medical Equipment carrier encompassing a 17-state region and Medicare Provider Analysis and Review (MedPAR), Carrier, Denominator and Hospice Analytical Files for the period 1997-2000. Specifically, the population of older Medicare beneficiaries receiving, and the physicians prescribing, this therapy will be described and contrasted with the demographics and outcomes of older patients hospitalized for heart failure but not receiving the drugs. The data will be used to develop predictors of inotropic agent use and mortality in this group at risk for re-admission and death. The second part is designed to assess physicians' knowledge about, attitudes toward and practices regarding the care of end-stage heart failure patients including perceptions of patient prognosis, quality of life, efficacy/toxicities of inotropic drugs and the role for hospice in a survey of 1200 cardiologists, geriatricians, internists and family/general practitioners. Approximately one-third of the physicians will be known prescribers of inotropic drugs. We plan to investigate how physicians make decisions and the degree to which the care an end-stage patient receives is influenced by physician specialty, volume, or other factors. Formal survey development methodology including performance of focus groups, cognitive interviews, and pilot testing will be applied. These studies will form the conceptual framework for an intervention study designed to address, at physician and patient levels, the process of selection of care options for older heart failure patients near the end of life.

Grant: 3R01AG009775-10S2
Program Director: SHRESTHA, LAURA B.
Principal Investigator: HAUSER, ROBERT M PHD
Title: The Wisconsin Longitudinal Study: As We Age
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 1991/06/01-2007/03/31

DESCRIPTION (provided by applicant): We propose to continue the Wisconsin Longitudinal Study (WLS) with a major round of data collection, 45 years after the high school graduation of the original 10,317 participants. We want to exploit the unique scientific value of the WLS to pursue a broad agenda of research on social and economic factors in health and aging. We represent diverse scientific fields - sociology, demography, epidemiology, economics, social and cognitive psychology, industrial engineering, neuroscience, social work, psychiatry, nursing, and medicine. Our plan for data collection - of which these proposed surveys are only the first phase - will span many modes: telephone and mail surveys, brain imaging, personal interview, anthropometric measurement, bio-indicators, content analysis of recorded interviews, and linked administrative records. We intend and expect that these new data, along with the rich data presently available from the WLS, will resolve old questions and open new areas of interdisciplinary inquiry about health, aging, and the life course. All WLS data will be released to the research community as soon as they have been collected, cleaned, and documented. We propose one-hour telephone and 48 page mail surveys in 2002-03 of more than 9600 surviving American men and women who were first interviewed as graduating seniors in high school in 1957 and were followed up in 1964, 1975, and 1992; they will be 63-64 years old when they are surveyed. (b) We propose parallel telephone and mail surveys of 7150 randomly selected siblings of the graduates; they vary widely in age and most were first surveyed in 1994; about 2100 were first interviewed in 1977. (c) We propose shorter (30 minute) telephone interviews with spouses (N = 10,150) and widows of graduates and their siblings (N = 850). The WLS is unique as a large scale longitudinal study of adults and their families that will soon cover almost half a century. It is a valuable public resource for studies of aging and the life course, inter-generational transfers and relationships, family functioning, long-term effects of education and of cognitive ability, occupational careers, physical and mental well-being, and morbidity and mortality. Our goal is to extend and enrich our observations of the WLS cohort since their adolescence in ways that will answer important research questions in aging for decades to come.

Grant: 5R01AG009775-11
Program Director: SHRESTHA, LAURA B.
Principal Investigator: HAUSER, ROBERT M
Title: The Wisconsin Longitudinal Study: As We Age
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 1991/06/01-2007/03/31

DESCRIPTION (provided by applicant): We propose to continue the Wisconsin Longitudinal Study (WLS) with a major round of data collection, 45 years after the high school graduation of the original 10,317 participants. We want to exploit the unique scientific value of the WLS to pursue a broad agenda of research on social and economic factors in health and aging. We represent diverse scientific fields - sociology, demography, epidemiology, economics, social and cognitive psychology, industrial engineering, neuroscience, social work, psychiatry, nursing, and medicine. Our plan for data collection - of which these proposed surveys are only the first phase - will span many modes: telephone and mail surveys, brain imaging, personal interview, anthropometric measurement, bio-indicators, content analysis of recorded interviews, and linked administrative records. We intend and expect that these new data, along with the rich data presently available from the WLS, will resolve old questions and open new areas of interdisciplinary inquiry about health, aging, and the life course. All WLS data will be released to the research community as soon as they have been collected, cleaned, and documented. We propose one-hour telephone and 48 page mail surveys in 2002-03 of more than 9600 surviving American men and women who were first interviewed as graduating seniors in high school in 1957 and were followed up in 1964, 1975, and 1992; they will be 63-64 years old when they are surveyed. (b) We propose parallel telephone and mail surveys of 7150 randomly selected siblings of the graduates; they vary widely in age and most were first surveyed in 1994; about 2100 were first interviewed in 1977. (c) We propose shorter (30 minute) telephone interviews with spouses (N = 10,150) and widows of graduates and their siblings (N = 850). The WLS is unique as a large scale longitudinal study of adults and their families that will soon cover almost half a century. It is a valuable public resource for studies of aging and the life course, inter-generational transfers and relationships, family functioning, long-term effects of education and of cognitive ability, occupational careers, physical and mental well-being, and morbidity and mortality. Our goal is to extend and enrich our observations of the WLS cohort since their adolescence in ways that will answer important research questions in aging for decades to come.

Grant: 5R01AG016732-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: HEBERT, LIESI E AB
Title: COMMUNITY EPIDEMIOLOGIC STUDY OF CAREGIVING AND HEALTH
Institution: RUSH-PRESBYTERIAN-ST LUKES MEDICAL CTR CHICAGO, IL
Project Period: 2000/09/30-2005/08/31

This is a revision of an application which was not funded. A population-based longitudinal study of the physical and psychological health effects of caregiving among African American and white community residents over age 65 is proposed to test the following hypotheses: 1) Caregivers will experience greater declines in physical health than non-caregivers as measured by: a. self-reported physical disability and health status; b. direct tests of physical performance; and c. self-reported health behaviors; 2) Caregivers will experience greater declines in psychological health (depressive symptoms, anxiety, anger) and smaller increases in six measures of positive well-being than non-caregivers; 3) Negative consequences of caregiving will be modified both by characteristics of the care recipient and by the resources available to the caregiver: a. Negative consequences will increase with the severity of the care recipient's cognitive, physical, and behavioral problems and with greater duration and time spent providing care; b. Negative consequences will decrease with greater caregiver income and social support; 4) African American caregivers will experience fewer negative consequences than white caregivers, which will be explained by more positive appraisals of caregiving and greater religiosity. The study design permits observation of the full range of caregiving activities, consequences and mitigating factors in a population representative group of caregivers. The study will distinguish between health changes occurring in this age group due to other causes and those due to caregiving because caregivers will be compared to a truly representative group of non-caregivers selected from the same community cohort. Observations for some will begin before start of caregiving and extend after its end. The study will use standardized measures and will build on data already collected in conjunction with a group which has been successful in achieving high rates of follow-up participation in biracial community studies. Results will quantify the caregiving exposures that lead to health consequences. Factors found to minimize negative health effects will provide potential interventions to minimize stress and maintain the health of older caregivers, and thereby minimize the social and economic impacts of caregiving.

Grant: 1R01AG024051-01
Program Director: SHRESTHA, LAURA B.
Principal Investigator: HENRETTA, JOHN C PHD
Title: Family Culture and Intergenerational Allocations
Institution: UNIVERSITY OF FLORIDA GAINESVILLE, FL
Project Period: 2003/09/30-2008/08/31

DESCRIPTION (provided by applicant): Intergenerational transfers occur within a family context, yet most research on the topic is atomistic, focusing on the attributes and behaviors of individuals in the family matrix and not on the family itself. Social norms and behaviors related to familial obligation and responsibility differ across families, distinguishing the transfer behaviors of one family from another and defining the intergenerational culture within which family members act. This research focuses on shared family traits, in addition to more conventional measures of individual kin, to develop a sociological analysis that: a) examines why similarly-configured families differ in their kin exchange behaviors and why individual characteristics have variable effects across families; b) locates research on transfers to older and younger generations within the same conceptual framework; and, c) examines race and ethnic transfer differences across families. Four central questions guide the proposed research: a) Do families differ in their collective orientation to intrafamily transfers, and what characteristics distinguish among families' transfer behavior? b) How similar to each other are the family transfer cultures of the families of orientation of marriage partners? c) How does family change over time affect transfers and is that relationship conditioned by family transfer culture? and d) Are there meaningful cohort differences in family transfers, distinct from differences in family structure? The Health and Retirement Study (HRS) is the major data source. Over the course of the proposed project, seven biennial waves of data (1992-2006) will become available. These data provide dynamic measures of transfer behaviors across as many as four generations of a family and a changing pool of donors and recipients as well as direct and indirect measures of family transfer culture. HRS oversamples of African Americans and Hispanics are adequate for the analyses of ethnic differences. Because the new Mexican Health and Aging Study (MHAS) is modeled on the HRS, comparable data are available to examine intrafamily transfers in a transnational perspective. Multilevel modeling is the primary analytic strategy. Each of the goals listed above requires parallel analyses of parent-to-child and child-to-parent transfers, incorporating a broad range of transfer and family measures, including indicators specific to each spouse/partner.

Grant: 5R01AG005552-16
Program Director: ELIAS, JEFFREY W.
Principal Investigator: HESS, THOMAS M MA PSYCHOLOGY
Title: Social Cognition and Aging
Institution: NORTH CAROLINA STATE UNIVERSITY RALEIGH, NC
RALEIGH
Project Period: 1985/08/01-2007/06/30

DESCRIPTION (provided by applicant): The proposed research will examine aging-related changes in cognitive functioning, with the goal of understanding how normative changes in basic cognitive skills, goals, and knowledge influence functioning in everyday contexts. It is assumed that the ability to acquire and accurately represent information from social contexts is an important predictor of adaptive functioning. Much information relating to everyday functioning (e.g., medical, financial, consumer) is transmitted through social contexts, including the media (e.g., television, newspapers) and interactions with others (e.g., physicians, financial planners). Thus, it is important to understand the impact that aging might have on reasoning in such contexts. In this research, it is hypothesized that aging-related decrements in the efficiency of basic cognitive functions negatively impact upon older adults' ability to control attention and operate on information in memory. This, in turn, results in reductions in the accuracy of decisions and judgments with aging due to less specificity of information in memory and a concomitant increase in the impact of irrelevant information. It is also hypothesized, however, that older adults adapt to these negative changes in basic cognitive functions by (a) being more selective in their expenditure of limited resources and (b) developing powerful interpretive knowledge structures that permit complex thinking with minimum drain on cognitive resources. These two factors may help explain why many older adults continue to function effectively in everyday life. In this research, adults aged from 20 to 85 will be tested in laboratory analogues of everyday situations to examine the impact of these two types of influences on representation and decision-making. Experiments will be conducted in which specific age-related factors are isolated and manipulated in order to gauge their impact on performance. Observed age-related differences will also be examined in relation to ability, health, and other contextual factors in order to better understand potential causal mechanisms. The long-term goal is the development of a model that will describe aging effects on social cognition in order to assist us in understanding the factors that influence older adults' functioning in everyday life. This should also facilitate our ability to structure environments to maximize adaptation to the aging process.

Grant: 5R01AG020153-02
Program Director: ELIAS, JEFFREY W.
Principal Investigator: HESS, THOMAS M MA PSYCHOLOGY
Title: Stereotype Threat, Aging, and Memory
Institution: NORTH CAROLINA STATE UNIVERSITY RALEIGH, NC
RALEIGH
Project Period: 2002/07/01-2005/06/30

DESCRIPTION (provided by applicant): Many negative stereotypes about older adults exist in our culture. One of the most pervasive relates to the belief that old age is characterized by traits such as incompetence, slowing, and forgetfulness, and that these traits are inevitable aspects of the aging process. Whereas there is considerable scientific evidence that demonstrates declining cognitive skills, there is emerging evidence that suggests a less pessimistic view of aging. For example, the effects of aging on memory are not universal, in that there are certain types of memory skills that exhibit minimal change with aging. Second, there is also emerging evidence that the degree to which age differences in memory are observed is influenced by situational factors that affect older adults' motivations and engagement in the task. Finally, and the focus of the proposed research, research also suggests that our negative stereotypes of aging may negatively affect performance independently of any inevitable effects of aging on performance. The research proposed herein will more thoroughly examine this possibility using the stereotype threat framework. Stereotype threat is thought to occur when members of a stereotyped group (e.g., older adults) are put into a position of potentially confirming the stereotype (e.g., being tested for memory). In such a situation, it is assumed that the individual's anxiety and evaluation apprehension is heightened, which in turn negatively affects their performance. Six separate studies are proposed to examine the situations that might induce stereotype threat in older adults as well as the factors that underlie its influence. Such research is important in terms of helping us to understand (a) the factors associated with age differences in memory performance, (b) the extent to which the validity of aging-related ability assessments might be affected by the operation of stereotype threat, and (c) the potential impact of stereotype threat on the performance of older adults in everyday situations in which they might be stereotyped (e.g., work settings).

Grant: 5R01AG011451-10
Program Director: ELIAS, JEFFREY W.
Principal Investigator: HOYER, WILLIAM J MS OTHER AREAS
Title: AGING OF COGNITIVE MECHANISMS
Institution: SYRACUSE UNIVERSITY SYRACUSE, NY
Project Period: 1993/04/15-2006/06/30

The proposed experiments build on a program of research aimed at understanding the potentials and limits of effective cognitive functioning during the adult years. Specific aims of the proposed research are 1) to describe cognitive aging in terms of the factors that regulate the rate of skill acquisition, and 2) to describe age differences in the relative efficiency of selected forms of skill learning (item learning, rule learning, feature learning, context learning, and sequence learning). Performance of younger and older adults under conditions that contrast forms of learning (e.g., simple item learning with rule learning) is expected to provide tests of general theories as well as developmental theories of skill acquisition. During the five years of this project, about 1000 women and men between the ages of 20 and 70 years will be tested in eight experiments. Experiments 1-4 examine age-related differences in the effects of practice on item learning, computational speedup, and the shift from computation to item learning under conditions that favor either item learning or computation. Experiments 5-7 are designed to contrast different forms of learning with one other so as to weigh the contribution of each to overall skill. The data from Experiments 5-7 will allow specific age deficits in learning to be identified, and will exploit those deficits to test general theories of learning and automatization. Experiment 8 investigates inter-session disruption and retention effects by age. The outcomes of the proposed research contribute to the understanding of the effective conditions of skill acquisition and retention throughout the adult life span.

Grant: 1R01AG023424-01
Program Director: STAHL, SIDNEY M.
Principal Investigator: HUGHES, SUSAN L DOTH
Title: Exercise Adherence Among Older Adults with Osteoarthritis
Institution: UNIVERSITY OF ILLINOIS AT CHICAGO CHICAGO, IL
Project Period: 2003/09/30-2008/08/31

DESCRIPTION (provided by applicant): Osteoarthritis (OA) is the most common condition affecting older people today. It is the leading cause of disability among older people and its impact is projected to increase substantially with the aging of the U.S population (CDC, 1999; CDC, 2003). To date, 10 randomized trials of exercise interventions have been conducted among persons with OA. Although most report positive short-term outcomes at three months or less, only two have reported mixed findings on longer-term adherence and related outcomes at 12 or 18 months. This paucity of data on the maintenance of long-term exercise behavior among persons with OA indicates an urgent need for additional studies of issue. This study will use a multi-site randomized controlled trial with repeated measures to assess the comparative effects of two different ways of enhancing long-term adherence to and benefits associated with participation in the evidence-based, Fit and Strong multi-component exercise intervention for older persons with lower extremity OA (Hughes et al., in press). We will recruit 600 persons to participate in the 8-week Fit and Strong program. At the conclusion of Fit and Strong, participants will be stratified by arthritis severity and randomized to either Negotiated Maintenance, in which individualized tailored adherence plans will be developed, or Mainstreamed Maintenance, in which participants will be mainstreamed into an ongoing facility-based program at each of four participating study sites. In addition, half of the participants in both maintenance arms will be randomly assigned to receive telephone reinforcement. We will use generalized estimating equations and random effects models to test the hypotheses that Negotiated maintenance participants will experience significantly greater levels of adherence to exercise at 2, 6, 12, 18, and 24 months, and significant improvements in self-efficacy for exercise, self-efficacy for exercise adherence, self reported and observed functional status, and psychosocial measures compared to Mainstreamed maintenance participants at 2, 6, 12, and 18 months.

Grant: 5R01AG016352-05
Program Director: ELIAS, JEFFREY W.
Principal Investigator: HUMMERT, MARY L. PHD
Title: SOCIAL COGNITION, COMMUNICATION, AGE STEREOTYPING
Institution: UNIVERSITY OF KANSAS LAWRENCE LAWRENCE, KS
Project Period: 1999/01/01-2004/12/31

This project will address the social cognitive processes that link communication behaviors and age stereotyping. Prior research by the PI has shown that young, middle-aged, and older adults hold both positive and negative stereotypes of older people. Further that research has established that negative stereotypes, more than positive ones, led to the use of patronizing speech with older targets. Age differences, however, are evident both in the complexity of age stereotype schemas and in the relationship between negative stereotyping and the production of patronizing speech. Older adults hold more complex age stereotype schemas and are less likely to use patronizing talk toward a negatively stereotyped target than are young and middle-aged individuals. The proposed project will add to this body of research by investigating how communication behaviors of older persons (e.g., responses to patronizing talk, self disclosures of health and personal problems, age-telling, verbosity) may contribute to negative stereotyping in the impression formation process. In addition, it will investigate the extent to which impression judgements of older persons and communication to older persons reflect implicit stereotyping. Specific aims of the project are: 1. To determine the communication behaviors of older adults that lead to positive and negative stereotyping; 2. To test the strength of the relationship between implicit age stereotypes, impressions of older communicators, and communications behaviors toward older persons; 3. To examine age differences in the social cognitive processes that link communication behaviors and age stereotyping.

Grant: 1R01AG024047-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: HURD, MICHAEL D PHD
Title: Intergenerational Financial Transfers
Institution: RAND CORPORATION SANTA MONICA, CA
Project Period: 2003/09/30-2008/08/31

DESCRIPTION (provided by applicant): Inter-vivos financial transfers and bequests total hundreds of billions of dollars each year, yet our understanding of their magnitudes and determinants is limited. The main goals of this proposed research are to estimate annual and lifetime flows of inter-vivos financial transfers, to find their determinants and to integrate them with estimates of bequest. These results will present a complete picture of intergenerational financial transfers in the older population. The research will develop, analyze, and estimate a formal economic model that combines inter-vivos financial transfers and bequests in a single unified framework. From these estimates we will calculate the degree of substitution between inter-vivos financial transfers and bequests. Based on this model, simulations will show how financial transfers and bequests respond to changes in the environment and to policy changes. For example, it will show how inter-vivos transfers and bequests from the elderly to their children would change as the result of a change in Social Security benefits. The research will be based on data from eight waves of the Health and Retirement Study.

Grant: 1R01AG020282-01A2
Program Director: STAHL, SIDNEY M.
Principal Investigator: JACKSON, JAMES S PHD
Title: Family Connections Across Generations and Nations
Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI
Project Period: 2003/08/15-2007/07/31

DESCRIPTION (provided by applicant): The purpose of this proposed study is to investigate solidarity, support and conflictual processes, and health and well-being outcomes, within and across ethnically and nationally diverse population samples of three-generation families. The Convoy Model of Social Support (Antonucci, 2002) and Solidarity and Conflict in Multi-Generation Families (Bengtson et al, 2001) provide a conceptual base for the study. It will capitalize on the NIMH funded National Study of African American Mental Health (field name - National Survey of American Life [NSAL]) to identify internationally representative samples of three-generation family lineages. Based upon current rates of identification in the ongoing NSAL (to be completed in November 2002), over 60% of the completed sample is expected to be members of eligible three-generation lineage families of African American, Caribbean black, and white non-Hispanic backgrounds, with members who reside both in the U.S. and internationally. We propose to obtain a random sample of 4158 individuals, or 1386 three-generation triads, to be interviewed in this proposed survey. Moreover, we would also link to two separately funded, parallel studies: a methodologically and conceptually parallel 3-generation telephone study in Japan and a European Community-funded study of five nations. The specific aims of this proposal are to: 1. Identify and explore the nature of intergenerational linkages and examine comparatively their structure, function, stability, and change as affected by migration, acculturation, ethnicity, race, gender and age, in representative population samples; 2. Explore the implications of different family structures, support and solidarity and conflict among generational members and the influences on health and well-being; 3. Explore in detail the growing social service needs and utilization patterns across generations, within families linked to societal and global aging, especially across migrational and acculturative differences, ethnicity, race, gender and age groupings; and 4. Examine the nature of cross-national similarities and differences in the previously noted structures and the function of intra-familial, intergenerational linkages in the United States, Europe and Japan. Dramatic demographic transformations create unique challenges that are changing the basic structure of societies around the world. The proposed study will help us anticipate, understand, and design support programs to cope with the challenges and problems facing individuals at all generation positions, families, and societies in the new century.

Grant: 1R01AG020994-01A1
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: JENSEN, ROBERT T PHD
Title: Life-Cycle Health and Wealth in Transition Economies
Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Project Period: 2003/04/15-2008/03/31

DESCRIPTION (provided by applicant): This project will examine the relationship between socioeconomic status (SES) and health over the life-course in two 'transition' economies, China and Russia. While the SES-health relationship has become of increased interest across a variety of disciplines, the majority of this work has focused on the most developed nations. Further, most studies have focused only on establishing the empirical correlation, with less attention to the specific channels through which it arises, or even direction of causality. To address these gaps, this project contains 6 interrelated components: 1) document the SES-health relationship for China and Russia, including how the relationship has changed over time, and the role of various explanatory factors; 2) examine the relationship between nutrition, food choice and income, and the implications for health; 3) explore the health consequences of various 'psychosocial' factors, such as economic stress, inequality and rank; 4) examine the short- and long-term health effects of economic shocks, and the range of strategies used to cope with such shocks; 5) examine the long-run health and income effects of childhood economic shocks; 6) examine the distribution of resources within extended, multigenerational households, and the implications for health.

Grant: 5R01AG020916-03
Program Director: CHON-LEE, ANGIE J
Principal Investigator: JUENGST, ERIC T. BS ETHICS IN
CLINICALPRACTICE
Title: Enhancement Ethics and the Molecular Genetics of Aging
Institution: CASE WESTERN RESERVE UNIVERSITY CLEVELAND, OH
Project Period: 2001/09/30-2004/08/31

DESCRIPTION (provided by applicant): Advances in the molecular genetics of cellular aging raise the prospect of intervening in the human aging process to dramatically extend the human life span. The development of such interventions would confront society with the challenge of interpreting, using and regulating the ultimate genetic enhancement technology: a technology that could allow us to change a basic constant of human life at the cellular level. This project is designed to combine the work of two ongoing research programs to begin to address these challenges. The first is the research that Eric Juengst, Maxwell Mehlman and Thomas Murray have been conducting on the ethical and public policy challenges that are posed generically by genetic enhancement technologies. The framework for ethical analysis and public policy development generated by that research would be applied here to the case of anti-aging interventions, both as a test of the framework and to see what it yields in this case. The second resource is the work of the other co-investigators, Stephen Post, Peter Whitehouse and Robert Binstock, on the clinical and social meanings of the human aging process. That research will be used to identify the issues to analyze in this project, by providing the landscape of contemporary social practices, values and beliefs that radical life extensions could challenge. Collaboratively, we will seek to anticipate the issues that anti-aging interventions could raise for three constituencies: the individuals and families that might use them, the health professionals that might provide them, and the public-policy makers that will shape the context in which they might become available. The project's methods will be analytic and discursive: we will be critiquing, constructing and proposing arguments on the basis of existing information and our previous work, through a regimen of regular research meetings and collaborative writing. This work will be overseen by an expert group of advisors; Carol Donley, Co-director, Center for Literature, Medicine and the Health Profession at Hiram College; Michael Fossel, Editor, Journal of Anti-Aging Medicine; Linda George, Associate Director, Center for the Study of Aging and Human Development, Duke University; and Thomas Murray, President, The Hastings Center.

Grant: 2R01AG010738-10A2
Program Director: STAHL, SIDNEY M.
Principal Investigator: KAHANA, EVA PHD
Title: Buffers to Impairment/Disability of Old-Old Continuation
Institution: CASE WESTERN RESERVE UNIVERSITY CLEVELAND, OH
Project Period: 1992/06/05-2008/04/30

DESCRIPTION (provided by applicant): We request renewal of our ongoing study of Buffers of the Impairment/Disability Cascade for five years, to achieve four primary aims that allow for major conceptual and methodological contributions: (1) test of our innovative proactivity-based model of health maintenance and successful aging (Kahana & Kahana, 1996; 2003); (2) generalize the model across sociodemographic contexts; (3) generalize the model across temporal contexts (age cohorts); and (4) extend the follow-up of long-term surviving members of our original sample from 14 to 18 years. We plan annual longitudinal follow-ups with a representative sample of 1,250 participants recruited from our two original study communities (On Top of the World Retirement Community in Clearwater, Florida, and Cleveland, Ohio) and from two newly added communities (Celebration, Florida, and Miami, Florida). Recognizing the growing diversity of lifestyles and ethnic backgrounds of the aged of the 21st Century, we will recruit Cuban-Hispanic study participants, and older adults who live in communities supporting age-integrated living, high levels of technology use, and social engagement. We thus maximize our understanding of the range and efficacy of proactive adaptations used by diverse older adults. Our cross-sequential cohort design will also permit comparison of a birth cohort of older adults who entered our original study 14 years ago with a birth cohort of the same age (70-83) entering the study 14 years later. Interviews will be conducted by trained interviewers with respondents randomly selected from Centers for Medicare & Medicaid Services lists. Attrition rates of 7-13 percent per year are estimated to yield a total sample size of 920 respondents during the final fourth year follow-up. To the extent the proposed model is supported across a broad range of communities and study populations and in two different cohorts, the causal relationships proposed would appear to be highly generalizable, rather than being restricted to unique and homogeneous groups of elders. We can realistically aim to achieve the ambitious goals of our planned study because it is closely linked to continuing our long-term research on Buffers of the Impairment/Disability Cascade among the Old-Old, which provides a committed cohort of long-term study participants, a closely collaborating research team, and an infrastructure of fieldwork experience and measurement resources.

Grant: 5R01AG016758-05
Program Director: STAHL, SIDNEY M.
Principal Investigator: KAHANA, EVA F PHD
Title: HEALTH CARE PARTNERSHIPS AND SELF CARE OF OLDER ADULTS
Institution: CASE WESTERN RESERVE UNIVERSITY CLEVELAND, OH
Project Period: 1999/08/01-2004/05/31

We will examine how responsiveness of Health Care Partners (Primary Care Physicians and Health Significant Others) and self-care undertaken by old-old adults (80+) lessens the adverse impact of chronic illness on their ability to function and help maximize the quality of their lives. Physicians, patients, and Health Significant Others are seen as partners in care, with responsiveness of Health Care Partners enhancing preventive and corrective self-care by patients. Extensive data will be obtained from elders about self-care goals and strategies, patterns of consultation with Health Care Partners, other providers, and lay health consultants, and about perceived responsiveness of Health Care Partners. A major innovative focus of the study deals with mutual influences between responsiveness of Health Care Partners on patterns of support use by elders. Complementary and compensatory models of patient interaction with physicians and Health Significant Others will be considered. We will obtain a long term longitudinal follow-up of old-old adults living in sunbelt retirement communities and a broad cross-section of urban elderly and racial minorities. We will collect four annual waves of data based on in-home interviews of an estimated 350 respondents in Florida and 350 respondents in Cleveland. These elderly constitute committed cohorts in two probability samples of community-based elders. Based on prior attrition rates, a combined sample size of 527 elderly persons is projected for the fourth year follow-up. We will also conduct annual telephone surveys with Primary Care Physicians and Health Significant Others of respondents to ascertain responsiveness in terms of patient knowledge, involvement and communication. We will use least squares regression, structural equations, latent growth curve analysis, and event history analysis to test our comprehensive causal model regarding buffers of the Disability Cascade. Specifically, we will examine the buffering effects of patient-responsive medical care, lay support, and proactive adaptation on the progression from chronic illness to disability and diminished quality of life. Data will also be obtained on satisfaction with health care, mortality and cost of care (information based on Medicare records) as salient medical outcome variables.

Grant: 1R01AG021985-01
Program Director: STAHL, SIDNEY M.
Principal Investigator: KANE, ROBERT L MD
Title: Nursing Effort and Quality in Long-Term Care Facilities
Institution: UNIVERSITY OF MINNESOTA TWIN CITIES MINNEAPOLIS, MN
Project Period: 2003/06/01-2005/05/31

DESCRIPTION (provided by applicant): The purpose of this study is to examine the relationship between nursing effort and quality of care for nursing home residents. This study uses extant data from time studies of nursing staff in three states and MDS data on the nursing home residents who were cared for by nurses in the time study to address the relationship between nursing effort and quality of care. Nursing effort is measured by the amount of minutes per day provided to each resident by nursing staff type (RN, LPN, aide, and other direct care staff). The quality measures, which cover both care processes and outcomes, are derived from the MDS and they employ case-mix adjusted quality indicators that have been widely used in previous studies but without the case mix adjustment. Multi-level analysis, HLM, will be used to address the nesting of effects where residents are clustered within nursing units. This study represents a major advance over prior work. Nearly all previous research into staffing and care quality has relied on facility-level measures of staffing and quality. This study will allow for a much more fine-grained analysis of both unit and resident-level effects. The database consists of 3125 residents in 98 nursing units from 62 facilities. Results should shed light on the current policy debate over nursing home staffing standards.

Grant: 5R01AG020717-02
Program Director: SHRESTHA, LAURA B.
Principal Investigator: KAPTEYN, ARIE PHD
Title: Internet Interviewing and the HRS
Institution: RAND CORPORATION SANTA MONICA, CA
Project Period: 2002/06/15-2007/05/31

DESCRIPTION (provided by applicant): We request funding for a five year project to conduct two Internet interviews with a subset of the respondents to the Health and Retirement Study (HRS), and to set up a separate Internet panel of 1,000 non-HRS respondents, who will be interviewed via Internet twice a year for four years, plus a control group of 500 non-HRS respondents, who will be interviewed once a year by telephone for four years. The data collection and analysis will inform the URS about the potential of Internet interviewing and may serve as a testbed sample for the HRS. Our proposed study covers both methodological issues and substantive issues, foremost in economics, cognitive psychology and epidemiology. In view of the current distribution of Internet access among the population (with access dropping off among older age groups), it is anticipated that in the foreseeable future the HRS will use Internet interviewing alongside other modes. This motivates the mixed mode design of our proposed study. Specifically, we aim: 1. To provide data that will permit a comparative study of the population of Internet interviewees with the population of telephone interviewees with the goal of understanding selection bias; 2. To provide more systematic insight in the properties of Internet interviewing in comparison with other modes of collecting survey data, in particular among middle aged and elderly respondents; 3. To initiate various experiments in questionnaire and question design, exploiting the potential of Internet interviewing. Special attention will be paid to the role of cognitive functioning and the suitability of the Internet as an interviewing environment; 4. To improve the measurement of various important objective variables such as consumption or wealth; 5. To develop new measurement methods for complex possibly subjective variables such as subjective probabilities, expectations, health histories, risk attitudes and time preference; 6. To make the data generated by these activities available to the research community; 7. To gear the outcomes of the research towards partial and gradual implementation of Internet interviewing in the HRS as of 2004.

Grant: 5R01AG020962-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: KAUFMAN, SHARON R PHD
Title: Old Age, Life Extension, and Geriatrics
Institution: UNIVERSITY OF CALIFORNIA SAN FRANCISCO SAN FRANCISCO, CA
Project Period: 2002/09/30-2006/08/31

DESCRIPTION (provided by applicant): The goal of this 4-year qualitative anthropological study is to investigate first, how physicians, patients age 70 and over and their families make decisions regarding the use of three groups of life-extending medical procedures (cardiac bypass, angioplasty and stent; kidney and liver transplant; and renal dialysis) and how they each respond to those procedures; and second, to identify socio-cultural issues of relevance to physicians and to society regarding the growing use of life-extending medical procedures on elderly patients. This will be an empirical, ethnographic study based on the collection of data by in-depth interviews with physicians, patients and their families, and by participant-observation of support groups for cardiac and transplant patients and of physician-patient discussions where life-extending procedures are discussed. There are 4 specific aims: 1) to provide a descriptive account of physician, patient, and family understandings of relationships among changing conceptions of old age, health in late life and expectations about life-extending medical care; 2) to learn how physicians in different specialties are extending the lives of their elderly patients and the values underlying their decisions; 3) to learn the structural and cultural constraints on their choices for life-extending procedures; and 4) to describe patient and family choices, knowledge and values. Coding-based qualitative data analysis will be used: cross-sectional comparison, thematic analysis, case studies, and frequencies of response. The interpretive goal is to examine in detail the social, structural and medical practices and values brought to bear on the extension of life at progressively older ages. This will be the first research that comprehensively addresses medical and lay decision-making surrounding life-extending medical procedures for older persons, and the responses and experiences of physicians, patients and families to those procedures.

Grant: 1R01AG024050-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: KEISTER, LISA A PHD
Title: Childhood Family Processes and Adult Wealth Ownership
Institution: OHIO STATE UNIVERSITY COLUMBUS, OH
Project Period: 2003/09/30-2007/08/31

DESCRIPTION (provided by applicant): This application seeks to advance knowledge about the role that childhood family processes play in adult wealth ownership and inequality. Research has documented growing inequalities in wealth ownership in recent decades, but understanding the processes that explain wealth ownership is limited. We propose to develop a general theoretical and empirical model of wealth accumulation that incorporates family processes during childhood with adult attributes and structural elements. We propose to explore the effect of childhood processes, including how parental involvement in children's lives (specific aim 1.1), the allocation of resources among siblings (specific aim 1.2), and race (specific aim 1.3) on adult wealth accumulation. We also propose to examine the effect of individual and family processes on population outcomes. We will investigate relations in accumulation behaviors across generations (specific aim 2.1), link accumulation behaviors to distributional outcomes (specific aim 2.2), and conduct policy experiments and make future projections of family patterns and wealth (specific aim 2.3). We propose to take advantage of survey data that includes both wealth information and family background information (e.g., the National Longitudinal Survey of Youth), detailed case studies, and other data sets that include even more detailed information about wealth ownership (e.g., the Survey of Consumer Finances). We will use traditional regression methods to analyze the longitudinal survey data and case study data, focusing on the effects of parental involvement in children's lives, the allocation of resources among siblings, and racial and ethnic differences in family processes on adult wealth ownership. We will then develop a simulation model that synthesizes data from these and other surveys, from federal estate tax data, and from aggregate sources of information on household behaviors and wealth ownership. The simulation model will allow us to identify patterns that are evident only when information is merged from multiple data sources, and it will facilitate exploration of the effects of individual and family processes on population outcomes such as wealth distribution. The simulation model will also facilitate policy experimentation and projections of future patterns of well-being under various scenarios.

Grant: 5R01AG009952-10
Program Director: ELIAS, JEFFREY W.
Principal Investigator: KEMPER, SUSAN PHD PSYCHOLOGY, OTHER
Title: SPEECH ACCOMODATIONS BY AND TO OLDER ADULTS
Institution: UNIVERSITY OF KANSAS LAWRENCE LAWRENCE, KS
Project Period: 1993/12/01-2003/11/30

In previous research on "Speech Accommodations by and to Older Adults" using a referential communication task, young adults adjusted their fluency, semantic content, and syntactic complexity to the perceived communication needs of their partners. Older adults did not make such speech adjustments and appeared to use a consistent speech style in a variety of situations, suggesting, like other lines of research, that older adults' speech production is constrained by working memory limitations that affect their production of complex syntactic constructions. The present proposal will extend this study of older adults' speech accommodations by using "on-line" experimental tasks manipulated the working memory demands of sentence production tasks. Three series of experiments are proposed. Series 1 will analyze language samples to assess the effects on concurrent processing demands on linguistic fluency, syntactic complexity, and semantic content. A baseline language sample will be compared to language samples collected while participants are concurrently walking, tapping their index fingers, tapping four fingers in a complex pattern, listening to concurrent speech, and listening to auditory babble. These concurrent tasks have previously been shown to affect performance on working memory tasks, hence, they are predicted to compete for working memory and, in turn affect speech production. Walking and tapping rates will also be examined in baseline and concurrent speaking conditions. Series 2 will use a sentence production task that controls the choice of lexical items and examines the latency to generate a sentence using a specified set of lexical items and the complexity of the generated sentence. Three experiments are planned: (2a) To examine sentence initiation times and sentence complexity as a function of the size of the set of specified lexical items. (2b) To examine sentence initiation times and sentence complexity for sentences generated from single verbs or for sentences generated from multiple verbs. (2c) To examine sentence initiation times and sentence complexity for sentences generated to complete simple and complex sentence frames using a specified inventory of lexical items. Series 3 will use a controlled sentence production task that examines the latency to initiate memorized sentences. Three experiments are planned: (3a) To examine sentence initiation times for simple and complex sentences. (3b) To examine intra-sentence pauses during the production of simple and complex sentences. (3c) To examine sentence initiation times for semantically constrained and reversible sentences. In all three series of experiments, individual differences in verbal ability, processing speed, working memory, and inhibition will also be examined.

Grant: 5R01AG018892-02
Program Director: ELIAS, JEFFREY W.
Principal Investigator: KEMPER, SUSAN PHD PSYCHOLOGY, OTHER
Title: Tracking older adults' eye movement while reading
Institution: UNIVERSITY OF KANSAS LAWRENCE KANSAS CITY, KS
Project Period: 2002/09/30-2006/08/31

DESCRIPTION (provided by applicant): The proposed investigation employs eye movement technology to study age differences in reading. Increased knowledge about age differences in reading and reading comprehension will be critical for improving older adults' understanding of important and often complex materials such as written medical information and instructions, treatment plans, informed consent forms, insurance forms, and other similar materials. Eye movement technology has proven to be important for studying group and individual differences in reading processes because eye movements are especially sensitive to cognitive factors affecting reading. We propose to use variations on the reading with distraction paradigm (Connelly, Hasher, & Zacks, 1991) to compare young and older adults' pattern of eye movements while reading texts with interposed distracting words and phrases. Although not a typical reading task, this method is useful as a way to test how reading and comprehension are affected by factors influencing the allocation of attention. Older adults typically read texts more slowly than young adults and have poorer comprehension of what they have read. In an effort to explain these differences, we combine the predictions of the inhibitory deficit theory (Hasher & Zacks, 1988), encoding deficit theory (Craik & Byrd, 1985), and Craik's (e.g., 1986) notions of environmental support. Six experiments are proposed to test inhibition and encoding accounts of age differences in reading and reading comprehension. We vary distracter salience, distracter length (number of words), semantic relation of distracter to target passage, distracter meaningfulness, and predictability of distracter location, in both sentence and text passages. Findings from these studies will permit a more complete account of age differences and a refinement of the inhibitory deficit hypothesis, and lead to a greater understanding of the processes underlying age differences in reading.

Grant: 1R01AG021010-01A1
Program Director: STAHL, SIDNEY M.
Principal Investigator: KING, ABBY C PHD
Title: Combining Exercise and Diet in Older Adults
Institution: STANFORD UNIVERSITY STANFORD, CA
Project Period: 2003/07/01-2008/06/30

DESCRIPTION (provided by applicant): Older adults, particularly those caring for impaired loved ones (family caregivers), are at substantial risk for inactivity and sub-optimal dietary patterns. The physiological impact and resultant reductions in chronic disease risk obtained by enhancing both of these key health behaviors have been increasingly recognized. Yet, the best methods for combining the two to optimize behavioral success, with respect to sustained improvements in physical activity and healthful dietary intake, remain unclear. Two general temporal approaches have been utilized to date: a Sequential approach that emphasizes shaping of positive experiences in one health behavior prior to introducing the second behavior (learning theory perspective); and a Simultaneous approach that focuses on the benefits that can be more rapidly gained by introducing both behaviors concurrently (a 'life change' perspective). No systematic comparison of these two approaches in influencing sustained physical activity and dietary change currently exists. The objective of this study is to compare these alternative approaches by conducting a randomized controlled trial to evaluate the effects of a 12-month telephone-supervised, home-based physical activity + dietary intervention, conducted in either a sequential or simultaneous fashion, on physical activity and dietary patterns. Older adult caregivers (N=240) who are under-active and have sub-optimal diets, will be randomly assigned to one of three programs or to an attention-control arm. The four arms will be matched with respect to amount and type of staff contact. Data will be collected at baseline, 4, 8, and 12 months using appropriate physical activity, dietary, physical performance, and quality of life measures. Our primary hypotheses are that (1) caregivers assigned to the experimental arms will show greater 12-month improvement in both behaviors than controls, and (2) those randomized to one of the two Sequential exercise + diet programs will show greater improvements in the two behaviors relative to adults assigned to the Simultaneous program, due to the greater mastery and lower level of stress engendered by this 'smaller steps' approach. Additional questions of interest include evaluation of potential mediators and moderators of the interventions, and intervention related effects on physical functioning and health-related quality of life. This study will contribute important theoretical and public health information concerning how best to combine physical activity and dietary behaviors to optimize sustained adherence and promote desirable health outcomes.

Grant: 2R01AG001760-23
Program Director: STAHL, SIDNEY M.
Principal Investigator: KLAG, MICHAEL J MPH
Title: Precursors of Premature Disease and Death
Institution: JOHNS HOPKINS UNIVERSITY BALTIMORE, MD
Project Period: 1979/08/01-2008/08/31

DESCRIPTION: (provided by applicant) This application addresses major issues in aging research: identification of risk factors for disease and death, prevention of decline in cognitive and physical functioning, and in end-of-life planning. These issues will be addressed in the Precursors Study, a prospective, longitudinal study of 1,337 former Johns Hopkins medical students followed from an average age of 22 to 71 years. This study has yielded insights into aging that complement cross-sectional or short-term prospective studies of larger populations. The cohort has high levels of education, socioeconomic status, and access to health care. This homogeneity controls for these potent modifiers of health and functional outcomes and permits a relatively unconfounded and precise estimate of the risk associated with other exposures. As we begin our 55th year of follow up, we will continue our detailed description of aging and the onset of disease. We will determine the risk of CVD and other diseases associated with characteristics assessed repeatedly throughout the life course. We expect that relative risk of CVD will decrease at older age of assessment and will use the richness of the information available to dissect out the reasons for this age-related decrement. In addition, we will determine associations of characteristics from youth to old age with level of and short-term change in cognitive function, as well as interaction with the e4 allele of Apolipoprotein E. Most studies of risk factors for cognitive decline are cross-sectional in nature or have follow-up times within the 'incubation period' of dementia, design features that impede accurate data collection because of memory impairment. We will also repeatedly assess physical functioning to determine risk factors for greater rate of decline associated with aging. Lastly, we will describe change in preferences for end-of-life treatment and how it is influenced by incident disease, life events, and mental health as well as personal characteristics assessed prospectively over the 50 plus years of follow-up. The Precursors Study provides a unique opportunity to test whether potentially modifiable factors, assessed prospectively up to 50 years before, relate to mental health and physical functioning in late life, when these factors might act, and for whom.

Grant: 5R01AG009221-10
Program Director: ELIAS, JEFFREY W.
Principal Investigator: KRAUSE, NEAL M BA
Title: WELL-BEING AMONG THE AGED:PERSONAL CONTROL & SELF-ESTEEM
Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI
Project Period: 1991/04/01-2006/03/31

DESCRIPTION (Adapted from applicant's abstract): The purpose of this application is to seek funds to continue work on the NIA-supported project, "Well-Being Among the Aged: Personal Control and Self-Esteem" (R01 AG-09221). The first three years of this project (1991-1993) were devoted to conducting a face-to-face nationwide survey of 1,103 older adults. Role-specific measures of stress, control, and self-worth were developed to test the following hypotheses: (1) that events arising in highly salient roles exert an especially noxious impact on well-being; (2) that these deleterious effects operate by eroding feelings of control and self-esteem associated with the roles in which these stressors emerged; and (3) that support provided by significant others tends to offset the impact of salient role stressors by bolstering bolster role-specific feelings of control and self-worth. The application seeks to build upon these findings by conducting two reinterviews with the participants in the baseline survey. This data will allow us to address the following new objectives: 1. To describe aggregate as well as individual-level change in multiple dimensions of stress, social support, personal control, self-esteem, and distress; 2. To estimate a series of three-wave panel models in order to evaluate the temporal ordering among the constructs listed above; 3. To assess whether levels of stress, social support, self-esteem, personal control, and distress vary across eight social roles when these roles are valued highly by older adults; 4. To estimate a latent variable model that is designed to see if specific kinds of stressors, social support, and feelings of control influence the selection of particular kinds of coping responses; 5. To examine the effects of role transitions on distress; 6. To assess whether specific types of salient role stressors exert a differential impact on depressive symptoms; 7. To explore whether social support provided in one role (e.g., the parental role) offsets the effects of stress arising in another role (e.g., the marital role); 8. To see whether the value placed on social roles influences whether the effects of stressors arising in one role spill over into another role.

Grant: 2R01AG014749-05
Program Director: STAHL, SIDNEY M.
Principal Investigator: KRAUSE, NEAL M PHD
Title: RELIGION, AGING, AND HEALTH
Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI
Project Period: 1997/09/30-2008/07/31

DESCRIPTION (provided by applicant): The purpose of this competing continuation application is to seek additional funds to continue work on the National Institute on Aging (NIA)-supported project: "Religion, Aging, and Health" (RO 1 AG14749). The first four years of this study were spent developing a comprehensive set of survey items to measure religion in late life. This research culminated in a nationwide survey of older whites and older African Americans (Wave 1) that was completed in 2001. A total of 1,500 older adults were interviewed successfully for the nationwide survey. Analysis of the nationwide data suggests that the newly devised religion items have sound psychometric properties, and that these measures are related to health and psychological well being in theoretically meaningful ways. Funds are requested to conduct three more waves of interviews (Waves 2 - 4) with all subjects who participated in the baseline survey (Wave 1). These additional waves of data will be used to address the following specific aims: 1.) To explore the relationships among gender, religion, and health; 2.) To examine the interface between stressful life events, religion, and health; and 3.) To continue research on race differences in religion and health among older whites and older blacks. A wide range of state-of-the-art data analytic procedures will be used to empirically evaluate these issues. Included among these procedures are individual growth curve models and latent variable structural equation models.

Grant: 5R01AG018386-02
Program Director: ELIAS, JEFFREY W.
Principal Investigator: KREMEN, WILLIAM S PHD
Title: A Longitudinal Twin Study of Cognition and Personality
Institution: UNIVERSITY OF CALIFORNIA DAVIS DAVIS, CA
Project Period: 2002/03/01-2007/02/28

DESCRIPTION (provided by applicant): We propose to conduct a longitudinal study to investigate ways in which genes and environmental factors contribute to cognitive and adaptive aging, and how the relative influence of genes and environmental factors may change over time. We will study the now middle-aged subjects from the Vietnam Era Twin Registry who we have been studying for the past 12 years. We will study 360 pairs of twins at age 51 years and 360 pairs at age 56, for a total sample of 720 twin pairs (Our colleagues at Boston University are concurrently submitting a grant application that parallels ours. In our application we are requesting funding to collect data from 360 pairs in our lab in Sacramento and in our colleagues' application, they are requesting funding to collect data from the other 360 pairs at their lab in Boston. The two applications comprise an integrated project.) Based on a broad, conceptual model of cognitive and adaptive aging, our Specific Aims are: 1) To characterize normative age-related changes in individual cognitive, health, and personality variables using the classical twin method (univariate approaches); 2) To explicate the bases of patterns of inter-relationships seen within the cognitive domain and between cognitive and non-cognitive variables using bivariate, multivariate, and longitudinal approaches; and 3) To characterize risk factors for change in cognitive and adaptive functioning during mid- and later-life using a co-twin control approach. We propose to address developmental issues by means of: 1) cross-sectional data from the twin cohorts; 2) cognitive and personality data collected previously from this sample; and 3) future longitudinal/cohort sequential data. In contemporary data collection we will include genotyping for APOE, personality traits and characteristics that have implications for later life cognitive functioning and well being (attachment, coping styles, positive and negative emotionality, constraint, resiliency), sensory functioning, and physical functioning. Cognitive assessment will consist of an extensive neuropsychological test battery with particular emphasis on working memory and frontal-executive function, episodic memory, and processing speed. This project will shed light on the dynamic interplay of biological and psychosocial environmental factors that create age-associated changes in health, cognition, and personality. Beginning the project in midlife is particularly advantageous for studying adult aging, enabling us to assess subjects who are in the "prime of life" at baseline, yet relatively close to the time when age-associated changes are likely to become more prominent.

Grant: 3R01AG009203-10S1
Program Director: ELIAS, JEFFREY W.
Principal Investigator: LABOUVIE-VIEF, GISELA PHD
Title: COGNITIVE AND EMOTIONAL MATURITY IN ADULTHOOD AND AGING
Institution: WAYNE STATE UNIVERSITY DETROIT, MI
Project Period: 1991/07/01-2004/06/30

DESCRIPTION (adapted from investigator's abstract): This sequential-longitudinal investigation extends an examination of patterns of cognitive-emotional development across the life span. Research conducted thus far during the initial project period has provided evidence for two psychological components of adult socioemotional development: reflective cognition and maturation of coping. Each is associated with somewhat different predictors/mechanisms: reflective cognition reflects the effects of education and acculturation, while maturity of coping/defense mechanisms reflects a secure relationship history. However the extent to which older individuals performance reflects age or cohort, and the extent to which they reflect flexible affect modulation versus inflexible affect inhibition, remains to be demonstrated. To examine these questions, a longitudinal sample of 330 individuals will be recontracted year 2 of the project. The resulting estimated 300 participants will be distributed over seven age groups from 15 to 93 years, with nearly equal numbers of males and females in each age group. Individuals will respond to cognitive and, socioemotional context and outcome measures. In addition, a subsample (N=150) of the original sample will be selected for an in-depth interview during which measures of physiological reactivity and facial expression of emotion will be interfaced with self-assessments (self-reports) of emotional reactivity. Finally, a new subsample of 154 African-Americans will be matched in age, gender and education to this longitudinal subsample. Analyses will examine the following issues: (a) if age gradients reported so far generalize across time; (b) if changes in reflective cognition and maturity are related to different predictor variables; (c) the degree to which study variables are related to survival; and (d) if the structural models so far established generalizes across time and cultural group; (e) age related differences in affect expression and affect repression/inhibition and (f) if affect repression/inhibition is involved in maintaining a sense of well-being and apparently good coping especially in older individuals.

Grant: 5R01AG017920-04
Program Director: ELIAS, JEFFREY W.
Principal Investigator: LACHMAN, MARGIE PHD
Title: CONTROL BELIEFS, MEMORY, AND AGING
Institution: BRANDEIS UNIVERSITY WALTHAM, MA
Project Period: 2000/04/01-2005/03/31

DESCRIPTION (adapted from investigator's abstract): A view commonly associated with aging is that memory loss is inevitable and irreversible. Research on memory aging consistently shows there are age-related declines on some aspects of memory, such as episodic memory for words. Nevertheless, not all individuals show decrements, and there is evidence that memory can be improved. Yet, many middle-aged and older adults believe that they have little control over their memory. Two aspects of control, beliefs about memory ability or competence (efficacy) and beliefs about contingency (the relation between effort and performance) will be studied. These beliefs not only show age differences and declines, but they are consistently related to performance outcomes. The aim of this research is to examine the role that memory control beliefs play in contributing to age differences in episodic memory performance and to consider what behavioral and physiological mechanisms link control beliefs and memory performance. Memory for categorizable word lists will be tested in adults between the ages of 21 and 80. It is expected that age differences in episodic memory for words can be reduced by instilling positive views of memory control and by offering opportunities for actual control. It is predicted that promoting a sense of control over memory will result in more effective strategy use, less stress reactivity, and better memory performance, especially for middle-aged and older adults. Stress reactivity and recovery, assessed using salivary cortisol, and strategy use will be tested as mediators of the relationship between control beliefs and memory. To the extent that we can understand the nature of this relationship, it may be possible to develop more effective intervention strategies to enhance memory performance. The results can provide promising directives for reducing memory impairment and improving the everyday functioning of older adults.

Grant: 5R01AG014299-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: LACHS, MARK S MD
Title: CRIME VICTIMIZATION, GENDER & MORTALITY IN OLDER ADULTS
Institution: WEILL MEDICAL COLLEGE OF CORNELL UNIV NEW YORK, NY
Project Period: 1997/09/30-2005/06/30

The specific aims of this research are (1) to identify risk factors for crime victimization in an observational cohort of community dwelling older adults, and to estimate the independent contribution of crime victimization to (2) erosion in health-related quality of life (functional status and self-rated health), (3) institutional health care utilization (hospitalization and nursing home placement), and (4) all-cause mortality in the cohort. This research hypothesizes that a broad variety of attributes predict crime victimization in older adults which may be medical (e.g. chronic disease), psychosocial (e.g. depression), or sociodemographic (e.g. poverty). The work also hypothesizes that crime victimization erodes health-related quality life, results in increased institutional health care utilization, and causes excess mortality. This influence on quality of life, health care utilization, and mortality persist even after adjusting for other factors that predict these morbid and mortal outcomes. Little is known about the epidemiology of crime committed against older adults, and virtually nothing is known about its health consequences. The investigators propose linking an established cohort of older adults (The New Haven EPESE cohort) who have been followed annually with standardized measures of medical, functional, and psychosocial health for over a decade, with Police Records from the cohort's catchment area. This would permit the largest community-based study of crime victimization in older adults ever conducted, at a fraction of the expense of assembling a new inception cohort for this purpose. Pilot data provided in this application demonstrate that a linkage with police records is indeed feasible, and would produce adequate events to test the study's hypotheses. This project joins the clinical and epidemiological expertise of the Principal Investigator, Mark Lachs, M.D., M.P.H., with the expertise of Ronet Bachman PhD, a criminologist who conducted an analysis of elderly crime subjects as part of the National Crime Victimization Survey for the National Institute of Justice. Additionally, the New Haven Police Department and the Yale School of Medicine (home to the New Haven EPESE cohort) participate in this innovative project which links community and academic resources. The broad, long-term goal of the research is to develop strategies to identify older adults at high risk for crime so that victimization might be prevented. If indeed victimization does occur, another long-term goal is to develop intervention strategies which avert or forestall mortality (and other morbid outcomes).

Grant: 5R01AG017889-04
Program Director: SHRESTHA, LAURA B.
Principal Investigator: LAUDERDALE, DIANE S PHD
Title: DEATH RATES AND DEATH DATA FOR ASIAN AMERICAN ELDERLY
Institution: UNIVERSITY OF CHICAGO CHICAGO, IL
Project Period: 2000/04/15-2005/03/31

The purpose of this project in the demography of aging is to analyze the mortality experience of Asian American elderly. Death rates, routinely constructed by combining vital statistics and census data, are much lower for the race category "Asian or Pacific Islander (API)" than those for any other race category - less than two-thirds of white rates, and are also lower than death rates in Japan, the country with highest life expectancy. Before concluding that this population is truly healthier, perhaps due to some combination of "healthy immigrant" effect or wealth, problems with data sources must be ruled out. Specifically, there is reason to suspect inconsistencies in race coding between death certificates and the census. Further, the aggregate API category may mask considerable heterogeneity among the six major ethnic groups: Japanese, Chinese, Korean, Vietnamese, Asian Indian, and Filipino Americans. The proposed project would determine age- and sex-specific death rates for those 65+ in each of these six groups using methodology which avoids the pitfalls of combining vital status and census data by employing a single data source for numerators and denominators, the Master Beneficiary Record at the Social Security Administration (SSA). We would identify persons 65+ in each of the six groups using methods for Asian ethnic identification developed in a previous project, based on race code, given name, surname/maiden name and place of birth. SSA death records for identified persons will be compared with death certificate age and race data. We will address these research questions: Do age-specific, sex-specific death rates for the elderly differ among the six major Asian American Populations? Do death rates differ by nativity, i.e. U.S.-born versus foreign-born? How reliable are age and race information on death certificates for Asian American elderly? Does reliability vary by ethnic group, age, nativity, or state of death? What are the cause-specific death rates by ethnic group, and by nativity? This work will allow more accurate projections of longevity for these rapidly growing ethnic populations, foster a better understanding of the relationship between immigration and health, and will identify major causes of mortality in each group, thus informing future epidemiologic research.

Grant: 5R01AG018781-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: LEVINSON, WENDY MD
Title: INFORMED DECISION MAKING IN OLDER PATIENTS AND SURGEONS
Institution: NATIONAL OPINION RESEARCH CENTER CHICAGO, IL
Project Period: 2001/09/30-2005/08/31

DESCRIPTION: As the population ages, elderly patients are confronted with difficult decisions about medical care. Communication between physicians and elderly patients is critical in helping patients make informed choices particularly about major interventions, like surgery. Communication to help patients make informed choices is not only imperative from an ethical and legal perspective, but effective communication between physicians and patients can improve the outcomes of care and patient satisfaction. This proposal builds on prior work by the investigators in which they developed and tested a framework to assess the informed decision-making (IDM) conversations in routine office visits. The proposal is collaboration between the researchers and the American Academy of Orthopedic Surgeons (AAOS), a membership organization of 25,000 surgeons. The specific goals are: 1) To assess the IDM communication skills of practicing orthopedic surgeons during routine office visits with their elderly patients (>65 years). This will be done by audio taping; routine visits with 100 surgeons and 1000 patients in the Chicago area. 2) To evaluate the association between IDM performance, surgeon, patient and visit characteristics. Surgeon characteristics will include a) demographics, b) attitudes toward older patients (ageism), participatory decision-making, and fear of litigation and c) prior communication training. Patient characteristics will include a) demographics (age, gender, race, SES) b) attitudes toward participation in decision making and c) health status. Visit characteristics will include a) length of the visit and b) presence of a third person (child, spouse) in the room. 3) To evaluate the association between surgeons IDM and patient satisfaction. Focus groups of elderly patients will review previously developed IDM criteria and provide input to ensure the criteria are "elder sensitive." 100 orthopedic surgeons will be recruited and audio taped with 1000 patients (10 per surgeon) in the office setting. Sources of data will include a) the audiotapes, b) surgeon and patient questionnaires. The tapes will be coded to identify each decision and will be rated for the presence or absence of the appropriate IDM criteria. The association between surgeons' IDM performance, surgeon, patient, and visit characteristics will be assessed using hierarchical logistic regression. The study will be the first large data set of actual communication between surgeons and older patients and fills a major gap in knowledge about IDM with the elderly. The study also forms the scientific foundation of a major education initiative by the AAOS designed to improve the communication skills of surgeons and ultimately the care of patients.

Grant: 5R01AG018394-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: LI, FUZHONG PHD
Title: TAI CHI, CONTROL, AND AGING
Institution: OREGON RESEARCH INSTITUTE EUGENE, OR
Project Period: 2000/09/30-2004/08/31

Description (adapted from the investigator's abstract): There is increasing evidence that exercise promotes psychological and physiological benefits for older individuals. Nonetheless, the prevalence of sedentary lifestyles increases, as people get older. Given the aging of the population, a major challenge for health professionals is to develop and deliver programs that enhance and maintain health status, and thereby, quality of life. The proposed randomized controlled trial takes a social cognitive approach (Bandura, 1977, 1986) to experimentally evaluate an intervention designed to improve physical and psychological control and subsequently, health status, using a moderate-intensity, low-cost, Tai Chi program for a vulnerable population of older adults. A four-year study is proposed with the primary objective of understanding the long-term effectiveness of Tai Chi in: (a) promoting psycho-social and physical benefits; (b) improving health status and quality of life, and (c) influencing known determinants of continued physical activity participation. Using a randomized control intervention trial, the study will focus on the effects of a Tai Chi program on theory-based mediators of changes in a variety of psychological control variables including self-efficacy and physical control variables including balance, among older individuals aged 70+ years, by comparing the overall difference in change between intervention (n=112) and exercise control (n=112) groups over time. The results are expected to provide a better understanding of the effects of Tai Chi on the targeted psychosocial and physical characteristics of older individuals, its sustained effects on their health, quality of life and exercise participation, and the feasibility of such programs for relatively low cost implementation in community facilities.

Grant: 2R01AG013642-06
Program Director: ELIAS, JEFFREY W.
Principal Investigator: LI, GUOHUA MD
Title: Pilot Aging and Aviation Safety
Institution: JOHNS HOPKINS UNIVERSITY BALTIMORE, MD
Project Period: 1997/09/15-2008/06/30

DESCRIPTION (provided by applicant): The broad, long-term objectives of this application are to better understand the effects of aging on pilots' safety performance and to improve aviation safety. The specific aims are: (1) to determine age-related variations in the relative risk of crash involvement for commercial aviation pilots; (2) to examine age-related variations in pilot errors in airline and commuter/air taxi crashes; and (3) to disseminate the study results in scientific and public communities and make relevant policy recommendations. Federal Aviation Regulations mandate retirement at age 60 years for all major airline (Part 121) pilots. This policy (usually known as the "age-60 rule") has been the subject of continuing controversy and research since its establishment in 1960. Previous studies examining the effects of aging on piloting performance were conducted primarily under controlled experimental conditions using flight simulators. Few observational studies have examined the association of pilot age with the risk of crash involvement. With funding from the National Institute on Aging, the investigators followed a birth cohort of 3,306 commuter/air taxi (Part 135) pilots from 1987 to 1997 and found that crash risk remained fairly stable as the pilots aged from their late 40s to late 50s. There were insufficient data from the longitudinal study to assess the crash risk beyond age 60. In the proposed project, the investigators will use the case-control design and surveillance data to assess age-related variations in the relative risk of crash involvement for both Part 121 and Part 135 pilots. Cases are pilots who were involved in major airline crashes (Part 121 cases, n=550) or in commuter/air taxi crashes (Part 135 cases, n=2,700) during 1983 through 2005, identified from the National Transportation Safety Board's aviation crash data system. Controls (1,100 Part 121 pilots and 2,700 Part 135 pilots) will be matched with cases on important confounding variables and selected at random from the Federal Aviation Administration's incident data system. Quantitative and textual data for each of the 550 major airline crashes and 2,700 commuter air taxi crashes will be analyzed in depth to delineate age-related differences in pilot error and other contributing factors. Results of this project can provide valuable empirical data for understanding the relationship between pilot aging and safety performance and for reassessing the "age-60 rule."

Grant: 5R01AG018384-02
Program Director: ELIAS, JEFFREY W.
Principal Investigator: LYONS, MICHAEL JOSEPH BA
Title: A Longitudinal Twin Study of Cognition and Aging
Institution: BOSTON UNIVERSITY CHARLES RIVER BOSTON, MA
CAMPUS
Project Period: 2002/03/01-2007/02/28

DESCRIPTION (provided by applicant): We propose to conduct a longitudinal study to investigate ways in which genes and environmental factors contribute to cognitive and adaptive aging, and how the relative influence of genes and environmental factors may change over time. We will study the now middle-aged subjects from the Vietnam Era Twin Registry who we have been studying for the past 12 years. We will study 360 pairs of twins at age 51 years and 360 pairs at age 56, for a total sample of 720 twin pairs (Our colleagues at the U. C. -Davis are concurrently submitting a grant application that parallels ours. In our application we are requesting funding to collect data from 360 pairs in our lab in Boston and in our colleagues' application, they are requesting funding to collect data from the other 360 pairs at their lab in Sacramento. The two applications comprise an integrated project.) Based on a broad, conceptual model of cognitive and adaptive aging, our Specific Aims are: 1) To characterize normative age-related changes in individual cognitive, health, and personality variables using the classical twin method (univariate approaches); 2) To explicate the bases of patterns of inter-relationships seen within the cognitive domain and between cognitive and non-cognitive variables using bivariate, multivariate, and longitudinal approaches; and 3) To characterize risk factors for change in cognitive and adaptive functioning during mid- and later-life using a co-twin control approach. We propose to address developmental issues by means of: 1) cross-sectional data from the twin cohorts; 2) cognitive and personality data collected previously from this sample; and 3) future longitudinal/cohort sequential data. In contemporary data collection we will include genotyping for APOE, personality traits and characteristics that have implications for later life cognitive functioning and well-being (attachment, coping styles, positive and negative emotionality, constraint, resiliency), sensory functioning, and physical functioning. Cognitive assessment will consist of an extensive neuropsychological test battery with particular emphasis on working memory and frontal-executive function, episodic memory, and processing speed. This project will shed light on the dynamic interplay of biological and psychosocial environmental factors that create age-associated changes in health, cognition, and personality. Beginning the project in midlife is particularly advantageous for studying adult aging, enabling us to assess subjects who are in the "prime of life" at baseline, yet relatively close to the time when age-associated changes are likely to become more prominent.

Grant: 3R01AG018384-02S1
Program Director: ELIAS, JEFFREY
Principal Investigator: LYONS, MICHAEL JOSEPH PHD
Title: A Longitudinal Twin Study of Cognition and Aging
Institution: BOSTON UNIVERSITY CHARLES RIVER BOSTON, MA
CAMPUS
Project Period: 2002/03/01-2007/02/28

DESCRIPTION (provided by applicant): We propose to conduct a longitudinal study to investigate ways in which genes and environmental factors contribute to cognitive and adaptive aging, and how the relative influence of genes and environmental factors may change over time. We will study the now middle-aged subjects from the Vietnam Era Twin Registry who we have been studying for the past 12 years. We will study 360 pairs of twins at age 51 years and 360 pairs at age 56, for a total sample of 720 twin pairs (Our colleagues at the U. C. -Davis are concurrently submitting a grant application that parallels ours. In our application we are requesting funding to collect data from 360 pairs in our lab in Boston and in our colleagues' application, they are requesting funding to collect data from the other 360 pairs at their lab in Sacramento. The two applications comprise an integrated project.) Based on a broad, conceptual model of cognitive and adaptive aging, our Specific Aims are: 1) To characterize normative age-related changes in individual cognitive, health, and personality variables using the classical twin method (univariate approaches); 2) To explicate the bases of patterns of inter-relationships seen within the cognitive domain and between cognitive and non-cognitive variables using bivariate, multivariate, and longitudinal approaches; and 3) To characterize risk factors for change in cognitive and adaptive functioning during mid- and later-life using a co-twin control approach. We propose to address developmental issues by means of: 1) cross-sectional data from the twin cohorts; 2) cognitive and personality data collected previously from this sample; and 3) future longitudinal/cohort sequential data. In contemporary data collection we will include genotyping for APOE, personality traits and characteristics that have implications for later life cognitive functioning and well-being (attachment, coping styles, positive and negative emotionality, constraint, resiliency), sensory functioning, and physical functioning. Cognitive assessment will consist of an extensive neuropsychological test battery with particular emphasis on working memory and frontal-executive function, episodic memory, and processing speed. This project will shed light on the dynamic interplay of biological and psychosocial environmental factors that create age-associated changes in health, cognition, and personality. Beginning the project in midlife is particularly advantageous for studying adult aging, enabling us to assess subjects who are in the "prime of life" at baseline, yet relatively close to the time when age-associated changes are likely to become more prominent.

Grant: 5R01AG020261-02

Program Director: PATMIOS, GEORGEANNE

Principal Investigator: MACKENZIE, ELLEN J PHD
BIostatISTICS:BIostatISTIC
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Title: 'Costs & Effectiveness of Trauma Care in the Elderly'

Institution: JOHNS HOPKINS UNIVERSITY BALTIMORE, MD

Project Period: 2002/03/01-2005/02/28

DESCRIPTION (provided by applicant): Each year, nearly one million elders are hospitalized for treatment of an acute traumatic injury, and these figures are expected to increase as the proportion of the population that is older grows and their risk of falls, motor vehicle crashes and assaults increases due to improved overall health status and mobility. The outcome from trauma in the elderly is often poor as it serves as the incipient event in a cascade leading to immobility, incapacity and death. While a systems approach to the delivery of trauma care (with triage of the more acutely injured to designated tertiary care facilities or trauma centers) is widely advocated for improving these outcomes, there is substantial evidence to suggest that one half to two thirds of older adults with major trauma are not currently being treated at trauma centers, a far higher proportion than in younger patients. Available data, however, do not allow us to determine if outcomes are indeed better in trauma centers versus non-trauma centers. Even fewer data are available for comparing the costs of care received in trauma centers and non-trauma center hospitals. The aims of the proposed study are three-fold: (1) to estimate the costs associated with the acute care and post-acute care of the elderly trauma patient and to compare these costs for patients treated at trauma centers and non-trauma centers; (2) to examine the contribution of pre-existing medical conditions on costs and outcomes following trauma in the elderly and to examine trauma center/non-trauma center differences among the elderly with pre-existing conditions; and (3) to describe the relationship between costs and outcomes of care received in trauma centers and non-trauma centers and examine the implications of these relationships for policy and program initiatives. The study takes advantage of an existing effort that is collecting one-year outcomes on over 3,000 elderly trauma patients treated at trauma centers and non-trauma centers. The current request is for funding an analysis of Medicare claims data. This analysis would substantially improve our ability to estimate costs of both acute and post-acute care related to the injury as well as provide better information on pre-injury morbidity which is known to substantially affect both outcomes and cost.

Grant: 1R01AG021650-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MADRIAN, BRIDGETTE C PHD
Title: Determinants of Saving in 401(k) Plans
Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Project Period: 2003/03/15-2007/02/28

DESCRIPTION (provided by applicant): We have built a database that records the savings and investment decisions of individual employees who have access to employer-sponsored 401(k) plans. Our database contains repeated annual cross-sectional observations on over 1 million employees at 28 large corporations. For eight of these firms, we also have detailed longitudinal data on every saving and asset allocation transaction conducted by individual employees at these firms--approximately 170 million transactions over the past nine years. Using these data, we plan to undertake a wide range of studies that analyze the determinants of individuals' 401(k) savings and investment choices. Our studies consider the impact of economic incentives like employer matching and of psychological factors like the framing of saving and investment choices, the impact of defaults, and the causes of procrastination. Our research also evaluates the effect of institutions that force employees to think about their retirement saving decisions. We examine a wide range of 401(k) outcomes, including participation, savings rates, trading frequency, asset allocation, loans, and cash distributions. Most of our research identifies the effect of institutional regimes by comparing participant behavior at a firm before and after a rule change in the 401(k) plan. Our research will identify the determinants of saving and asset allocation choices in 401(k) plans and may be relevant for related retirement savings plans, like individual Social Security accounts.

Grant: 3R01AG021650-01S1
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MADRIAN, BRIDGETTE C BA
Title: Determinants of Saving in 401(k) Plans
Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Project Period: 2003/03/15-2007/02/28

Abstract Text Not Available

Grant: 5R01AG021017-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: MAGAI, CAROL L PHD
Title: Ethnicity & Socioemotional Functioning in Later Life
Institution: LONG ISLAND UNIVERSITY BROOKLYN BROOKVILLE, NY
CAMPUS
Project Period: 2002/09/30-2007/08/31

DESCRIPTION (provided by applicant): **Aims:** This application addresses the NACA's Minority Aging Review Committee's call for longitudinal population-based research on minority samples and the clarification of the role of ethnicity in human development and aging. The present research involves an examination of socioemotional functioning in later life and its relation to health and resiliency. In 1996-1996 data on economic, socioemotional, and cultural variables were collected on a stratified random sample of individuals (N=1 118), ranging in age from 65-86 years and comprising four ethnic groups: US-born African Americans, African Caribbeans, US-born European Americans, and Immigrant Europeans from Eastern Europe. In the present application we propose two waves of follow-up data with two major objectives. The first objective is to examine patterns of stability and change with respect to discrete emotions, attachment styles, and social networks, and to test the relevance of, and cross-cultural generality of, theoretical models of discrete emotions theory, attachment theory, and socioemotional selectivity theory. The second objective is to determine the predictors of survival and resilience on the one hand and morbidity and mortality on the other. More specifically, the study aims to predict survival as a function of socioemotional variables, including emotion traits, emotion regulation style, attachment style, and social networks, controlling for SES, lifestyle risk factors, and health at TI, and to develop models for predicting morbidity and mortality in ethnic sub-populations of African Americans and European Americans. **Method:** Respondents will be re-contacted to participate in two more waves of data collection. Virtually all of the measures collected at TI will be re-administered to those who are cognitively intact. These data will be used to test formulations derived from discrete emotions, attachment, and socioemotional selectivity theories. In the fifth year of the grant, the National Data Index will provide data on time and cause of death for those respondents who have died during the interim. **Analysis:** Cross-lagged panel analysis will be applied to the three waves of data to assess stability and change in socioemotional functioning. Survival analysis will be applied to the mortality data

Grant: 5R01AG008211-11
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MAGAZINER, JAY S. MOTH
Title: EPIDEMIOLOGY OF DEMENTIA IN AGED NURSING HOME ADMISSIONS
Institution: UNIVERSITY OF MARYLAND BALT PROF BALTIMORE, MD
SCHOOL
Project Period: 1991/08/15-2005/03/31

DESCRIPTION: The long-term care of older persons with dementia is a major concern of providers and policymakers. Approximately 750,000 persons with dementia in the United States reside in nursing homes, and more than 800,000 new cases enter these facilities each year. The cost of caring for persons with dementia who reside in nursing homes has received only limited research attention, despite the fact that the aggregate cost of caring for this group is estimated to be as high as \$120 billion annually. The aims of the proposed continuation study are to: 1) determine the temporal patterns (up to six years) of direct medical care costs and utilization of demented v. non-demented persons admitted to nursing homes for the first time; 2) compare the direct medical care costs and utilization of these demented v. non-demented persons at different levels of functioning and comorbid status; 3) evaluate the variability in costs and utilization for demented v. non-demented new admissions by characteristics of the nursing home; and 4) assess the sensitivity of a diagnosis of dementia using secondary records to determine whether associations observed in Aims 1-2 are robust to alternative definitions of dementia. These aims will be addressed by linking Medicare and Medicaid claims data for up to six years following admission to data from the current study, "The Epidemiology of Dementia in Aged Nursing Home Admissions," (R01 AG0S21 1) in which 2,285 new admissions to a representative sample of 59 nursing homes in Maryland, 1992-1995, were enrolled and evaluated for the presence of dementia by an expert clinical panel of neurologists, psychiatrists, and a geriatrician. These new admissions were similar in demographic, functional, and comorbid status to nursing home admissions elsewhere in the U.S. during the same period. Cost and utilization rates defined by type of service, procedures, sites of care, and payor (Medicare/Medicaid) will be expressed in per person month terms, and longitudinal Poisson regression models will be used to estimate these rates and examine their association with individual (e.g., dementia diagnosis, function, comorbidity) and environmental (e.g., structure and process of care) characteristics. With changes in reimbursement for those in nursing homes and the increasing demand to care for persons with dementia in nursing homes and other settings, policymakers need to have information on cost to optimize care for this growing segment of the long-term care population.

Grant: 2R01AG001159-27
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MANTON, KENNETH G PHD
Title: Demographic Study of Multiple Causes of Death
Institution: DUKE UNIVERSITY DURHAM, NC
Project Period: 1980/04/01-2008/03/31

DESCRIPTION (provided by applicant): Total mortality in the U.S. elderly population has changed significantly due to declines in heart disease, and stroke and, recently, (> 1990) cancer mortality. Research suggests that, even at advanced ages, morbidity and disability can be modified significantly before death - and influence the diseases responsible for death --through lifestyle changes, cohort experiences, changes in medical technology, and changes in health care access. We will examine temporal and cohort changes in the causes of mortality using several types of data - each with characteristic strengths. One type, multiple cause of death data, will soon be available for a long enough period of time (1968 to 2000) that cohort differences in the multiple conditions reported at death can be examined. Data, from longitudinal population studies, provide information on the temporal relation of morbidity and disability changes for lengthy periods prior to death. This adds a crucial intra-individual temporal dimension to analyses of human failure processes at late ages. To analyze these data we will use statistical estimation strategies designed for analyzing combinations of longitudinal demographic and health survey data sets - each with different statistical and measurement properties. With these data and methods we will examine hypotheses about recent (1990-2000) U.S. declines in overall cancer mortality, i.e., what ages does it affect most, which types of cancer changed most, were changes due to prevention or improvements in treatment, how are estimates of cancer mortality declines affected by trends in circulatory disease death? We will also examine hypotheses about changes in the age dominance of specific conditions, e.g., what types of circulatory disease, and co-conditions, emerge at, say, ages 65 to 75 vs. ages 85+. This will produce insights into changes in human mortality processes at late ages where growing numbers of death will occur in the future as the U.S. population ages and the numbers of nonagenarians and centenarians increase. This is important in forecasting life expectancy and the growth of the extreme elderly U.S. population.

Grant: 5R01AG017644-04
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MARMOT, MICHAEL G OTH
Title: ENGLISH LONGITUDINAL STUDY OF AGING
Institution: U OF L UNIVERSITY COLLEGE LONDON LONDON,
Project Period: 2000/09/30-2005/08/31

DESCRIPTION (adapted from investigator's abstract): The Whitehall II study of 10,308 male and female civil servants aged 35-55 years at entry (1985-1988), was established to examine the role of specific psychosocial, lifestyle, biochemical and physiological factors as possible explanations of these inequalities. True age related changes in these exposures, or cumulative exposure measured longitudinally, are hypothesized to predict changes in SES differences in health with age. At the 10-year follow up of the cohort, NIA support funded collection of data to repeat outcome measures of health functioning, cognitive functioning, components of the metabolic syndrome and ApoE genotyping. This application requests funding to analyze the data collected to date and to contribute to specific elements of the 15-year follow-up of the cohort. This funding will enable the investigators to accumulate more endpoints and track health functioning into older age, relate them to early life and mid-life exposures, and thereby allow us to establish psychosocial and biological pathways of disease and health inequalities. The aims of the application are: (1) To describe and explain patterns of change with age in health status in relation to SES; (2) To determine if the gradient in health functioning differs from pre-retirement to retirement; (3) To examine the relationship between SES and change in cognitive function with age; (4) To investigate specific biological pathways linking SES by examining the causes and consequences of their change with age. The Whitehall II study is uniquely poised to address these questions, offering: civil service grade as an excellent measure of SES; longitudinal design with participants comparatively young at entry allowing the detection of antecedents of change; repeated measures of exposures; a wide range of exposure data; substantial power to detect age-related change, and its interaction with SES; wide range of health outcomes including health and cognitive functioning, components of the metabolic syndrome, mortality, non-fatal diagnoses and sickness absence.

Grant: 1R01AG023410-01
Program Director: STAHL, SIDNEY M.
Principal Investigator: MARTINSON, BRIAN C PHD
Title: Maintaining Physical Activity in Older Adult MCO Members
Institution: HEALTH PARTNERS RESEARCH FOUNDATION MINNEAPOLIS, MN
Project Period: 2003/09/30-2008/08/31

DESCRIPTION (provided by applicant): The benefits of physical activity for adults are well established, but less than one-third of older adults in the U.S. have achieved recommended levels of physical activity despite widespread clinical recommendations to increase physical activity in recent years. Clinic-based approaches to increasing physical activity are expensive, difficult to implement in busy practice settings, and have limited reach. Moreover, evidence of the efficacy of such approaches is equivocal. A population-based approach may be a more effective and less costly strategy to increase levels of physical activity in older adults. Population studies of physical activity have demonstrated that each year, many sedentary older adults initiate physical activity, but a nearly equal number of those who were active become sedentary. Among older adults initiating physical activity, only half continue to be active 3 months later. We hypothesize that a population-based approach that emphasizes physical activity maintenance can substantially increase physical activity levels in a defined populations of older adults. This hypothesis is tested in a 24-month randomized trial evaluating an innovative, theory-based behavioral intervention to maintain physical activity in a random sample of 50-70 year old adults who have recently become at least moderately active. One thousand (1000) subjects will be randomized to one of two experimental groups: 1) a "usual care" control group, and 2) an interactive phone- and mail-based intervention program tailored to maintaining physical activity in older adults. The primary outcome measures are: 1) physical activity, assessed as kcals/wk expenditure; and 2) physical activity maintenance, assessed as follow-up kcals/wk expenditure relative to baseline. Careful measurement of the penetration of the intervention into a well characterized older adult population, and the costs of the intervention, will be assessed. Psychosocial and behavioral mediators of physical activity maintenance will also be examined. Study results will be relevant to policy makers, health promotion practitioners and health plans, and will provide practical information on the effectiveness, population penetration, and costs of an intervention designed to maximize population levels of physical activity among 9 older adults.

Grant: 5R01AG015384-03
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MC DOUGALL, GRAHAM J PHD
Title: IMPROVING EVERYDAY MEMORY IN AT RISK ELDERLY
Institution: UNIVERSITY OF TEXAS AUSTIN AUSTIN, TX
Project Period: 2001/03/01-2006/02/28

Older adults want to live independently in the community for as long as possible. Factors which place older adults at a high risk for institutionalization include loss of memory performance, and the need for assistance with instrumental activities of daily living. Education and cognitively demanding environments are considered important means of remaining mentally fit. Older adults are capable of improving their memory but whether a psychosocial intervention may assist them to improve or maintain their instrumental activities of daily living is not known. The aims of the study are to determine (1) the effects of the Cognitive Behavioral Model of Everyday Memory (CBMEM)-based memory training intervention with booster sessions on memory self-efficacy, metamemory, anxiety, depression, memory performance, and instrumental activities of daily living; (2) whether the CBMEM based memory intervention will affect the distal functional outcome through its effect on the mediator variables (anxiety, depression, memory self-efficacy and metamemory) and the proximal outcome of memory performance; and (3) to examine the participants' views of the most and least helpful aspects of the CBMEM intervention. The intervention is an 8-session, 1 1/2 hour classroom course designed to teach older adults the use of strategies to improve everyday memory. Strategically placed booster sessions will be provided to subjects within 3 months following the last class session. Bandura's self-efficacy theory guides this study. A sample of 240 adults, aged 65 and older and living independently in the community will be recruited from Austin Travis County, from high rise apartments and retirement facilities. Individuals scoring <23 on the Mini-Mental Status Exam will be excluded from the study. All participants will complete the MMSE, Rivermead Behavioral Memory Test, the CES-D Depression Scale, Spielberger State-Trait Anxiety Inventory, the Medical Outcome Study-36, the Direct Assessment of Functional Status, and the Metamemory and Memory Self-Efficacy scales. In this randomized clinical trial subjects will be randomly assigned to experimental and comparison groups. Data collections will occur over 27 months on five occasions with face-to-face interviews. Data analysis will include descriptive statistics, correlations, 2X5 MANOVA and hierarchical regressions.

Grant: 5R01AG016593-02
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MC GARRY, KATHLEEN M PHD
Title: NON-PECUNIARY ASPECTS OF THE RETIREMENT DECISION
Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Project Period: 2000/09/30-2007/08/31

The proposed research will investigate how non-pecuniary factors potentially influence the retirement decision. The key areas of focus will be caregiving responsibilities and attitudes. Existing literature documents the effects of financial incentives on the retirement decision (e.g., pensions, Social Security); one goal of the proposed research is to contribute to the (relatively new) literature that incorporates "non-economic" factors. The proposed research will extend the retirement, caregiving, and intentions literatures of endogenous decision making. Another facet of the proposed research will incorporate expectations and uncertainty into retirement models. These goals are made feasible by improved data sources and new econometric techniques. The research will proceed as follows: 1) consider the differences in attitudes and caregiving responsibilities across demographic and gender groups, 2) examine the relationship between subjective probability assessments and actual outcomes, noting that the "overall" attitude of the individual will affect these assessments, 3) investigate the endogeneity between the caregiving and retirement decisions, 4) modify a dynamic "base case" behavioral model of retirement to incorporate these non-pecuniary influences, 5) simulate the effects on the retirement decision of changes in public and corporate policy. The principal dataset to be used in the analysis is the HRA (HRS/AHEAD) survey. The HRA is a natural choice for the analysis because of its large sample of retirement-age individuals. It also contains a rich collection of financial information at the individual level, enabling models of the effects of non-pecuniary incentives to control for the financial effects which have been shown in previous studies to be quite important. The dataset also contains a set of subjective probability questions which can be used to predict outcomes in subsequent waves of the surveys.

Grant: 5R01AG007137-16
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MCARDLE, JOHN J PHD
Title: DYNAMIC GROWTH & CHANGE IN ADULT INTELLECTUAL ABILITIES
Institution: UNIVERSITY OF VIRGINIA CHARLOTTESVILLE CHARLOTTESVILLE, VA
Project Period: 1987/06/01-2004/06/30

Our previous research on the Wechsler Adult Intelligence Scale has produced: (1) a large-scale data base of WAIS information useful for aging research, (2) some novel structural equation models appropriate for aging research, (3) some results about the complex measurement functions of the WAIS, and (4) some results about the complexity of growth curve functions of intellectual ability. During the past four years of this project we have measured a strategically selected set of adults who had been tested before on a wider battery of ability measures, including (5) three-wave longitudinal retest data on the National Growth and Change Study (NGCS) sample, (6) a seventh-wave of longitudinal data on the smaller Bradway sample, and (7) current measurements of the Berkeley Growth Study participants. We have also (8) developed dynamic models for unraveling patterns of leading and lagging indicators of aging processes. In this competing continuation proposal we will continue to use and develop new statistical methods for the synthesis of research on the measurement of dynamic changes in the growth curves of intellectual abilities. We will concentrate on the use of the existing databanks to provide an evaluation of the structural, kinematic, and dynamic hypotheses of the "theory of fluid and crystallized intelligence", and we collect new data from newly completed neurological and experimental studies. The analyses planned include (1) improved ability measurements based on item response theory and improved factorial structure through convergent operations, (2) a formal evaluation of the growth and declines of abilities through latent growth and bear dynamic models, (3) a formal evaluation of the age-based leading and lagging indicators of multivariate developmental sequences through some new multivariate dynamic structural equation models, (4) the creation of a new archive of experimental and neurological measures to evaluate convergent measurement relationships using confirmatory modeling techniques, and (5) provide new methods for further research on aging. These new results will help synthesize all past research on the WAIS, explicitly define the relationships of the WAIS with currently collected measures, and clarify the growth and decline of intellectual abilities across the adult life-span.

Grant: 3R01AG007137-16S1
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MCARDLE, JOHN J PHD
Title: DYNAMIC GROWTH & CHANGE IN ADULT INTELLECTUAL ABILITIES
Institution: UNIVERSITY OF VIRGINIA CHARLOTTESVILLE CHARLOTTESVILLE, VA
Project Period: 1987/06/01-2004/06/30

Abstract Text Not Available

Grant: 5R01AG012113-05
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MCAULEY, EDWARD MOTH
Title: Exerise, Aging, and Psychological Function
Institution: UNIVERSITY OF ILLINOIS URBANA- CHAMPAIGN, IL
CHAMPAIGN
Project Period: 1995/09/30-2004/01/31

This proposal is a competitive renewal which examines the long-term (5 years) follow-up effects of a six-month exercise program (Illinois Active Aging) on psychological function in older adults (N=174). In addition, a media and telephone booster intervention to increase physical activity and, in turn, psychological function in the original participant sample is proposed. The specific aims are: (a) To examine the shape and form of physical activity participation, physical fitness, and psychosocial function at approximately five years beyond entry into a six-month walking or stretching/toning exercise intervention; (b) To determine which social, psychological, behavioral, and physical factors determine long-term physical activity maintenance; (c) To examine the effects of a six-month telephone and mail-based intervention on physical activity participation and psychological function five years beyond the initial intervention. It is expected that the "booster" intervention, as compared to the control group will increase their levels of physical activity thereby increasing their physical fitness levels. In addition, it is expected that the intervention will lead to enhanced self-efficacy, self-esteem, and subjective well-being; (d) Finally, the role played by physical activity participation, fitness, and self-efficacy in improved psychological function will be examined. There are several strengths associated with the proposed studies. First, little is known about the long-term effects of exercise programs on the physical and psychological health of older adults beyond the more immediate effects of activity interventions. This project proposes to employ multiple sample latent growth curve methods to map the growth and form of change in these health parameters five years beyond the start of the original randomized controlled trial. No exercise trials to date have attempted to follow subjects for such a length of time. Second, we the proposal is theoretically grounded rather than descriptive and we expect changes in self-efficacy to be instrumental in changes in function. Third, we propose to implement a media/telephone intervention to try to reverse the expected declines in physical activity and psychosocial function. Typically, after standard follow-up assessments in exercise trials, no such efforts are made. As such, the proposed study represents a unique attempt to further understand the role played by physical activity in the psychological health of older Americans.

Grant: 5R01AG020118-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: MCAULEY, EDWARD MOTH
Title: Activity, Gait, and Efficacy (AGE) in Older Women
Institution: UNIVERSITY OF ILLINOIS URBANA- CHAMPAIGN, IL
CHAMPAIGN
Project Period: 2002/08/15-2006/07/31

DESCRIPTION (provided by applicant): Although studies have investigated rates of physical activity in African Americans and the overall rates of disability in African Americans, few studies have examined the relationship between physical activity, physical function, and health status in older black adults. Given much lower rates of physical activity in African Americans as compared to whites, it is important to examine in greater detail the extent to which physical activity differentially influences health status in this population and to identify those parameters that mediate this relationship. Levels of physical activity in older women, and particularly older African American women, are extremely poor putting them at elevated risk of morbidity and mortality. This proposal employs a social cognitive framework to examine the longitudinal relationships among physical activity patterns, expectations, balance, gait, and health status in 150 white and 150 black older (age 60-80 years) women. Based upon preliminary studies, we propose that levels of physical activity influence expectations (efficacy and outcome) which influence overall health status through their effects on balance and gait. Additionally, we propose that fear of falling is influenced by efficacy expectations and also has a direct effect on balance. Latent growth curve strategies will be employed to examine developmental change in the model constructs over a two year period. Additionally, the relationships among changes in these variables over the study period will allow conclusions to be drawn relative to the roles played by parameters mediating the relationship between physical activity and health status in older black and white women. Only when we can reliably identify such patterns of relationships will we be effectively able to prescribe and promote public health agendas and programs to maximize health, function, and well-being in all older adults.

Grant: 5R01AG013973-13
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MCEVOY, CATHY L. PHD PSYCHOLOGY
Title: Prior Knowledge Effects in Cognitive Aging
Institution: UNIVERSITY OF SOUTH FLORIDA TAMPA, FL
Project Period: 1989/09/22-2006/04/30

DESCRIPTION (provided by the applicant): The specific aims of this project are to understand changes and stability in memory processes associated with aging and how those changes are influenced by the person's ability to use a lifetime of prior knowledge. This project has been exploring the interface between what is known and what is new, and how this interface can be used to understand cognitive aging. People come to the lab with vast knowledge about their language. What is known, for the purpose of this project, is the lexical network each person has for the words used in the experiments. What is new is the episodic appearance of each word. The words SMELL, BOOK, LADDER, etc. may be presented in a memory experiment and everyone is familiar with and has lexical knowledge for these words. What is new in the experiment is that SMELL, BOOK, LADDER, etc. are the words to be remembered, and not other words. A major focus of the present project is to understand how activating prior knowledge affects recall and how this influence changes as adults age. We study memory using tasks in which we manipulate characteristics of the prior knowledge that is assumed to be activated. Through these manipulations we track the influence of activation on memory, observing both stable influences across younger and older adults and changing influences. We are particularly focused on three major issues: is the activation of prior knowledge as useful in prompting recall for older adults as it is for younger adults; is the utilization of prior knowledge more fragile for older adults when attentional resources are reduced; and are there age differences in inhibiting irrelevant prior knowledge? These issues have important implications for normal age changes in memory and for abnormal changes associated with dementia, particularly Alzheimer's disease. Alzheimer's can be thought of as a pathological change in memory processing that is superimposed upon the normal changes associated with aging. To understand how Alzheimer's affects memory it is essential to understand how the person would perform in the absence of the disease. This project also has implications for understanding how memory is affected by differences in the development of the mental lexicon (for example, with deaf students) or differences in the utilization of prior knowledge (as when a person has depression or substance abuse). Throughout life what is known influences what can be remembered, and understanding this influence is the goal of this project.

Grant: 1R01AG022067-01
Program Director: STAHL, SIDNEY M.
Principal Investigator: MCHORNEY, COLLEEN PHD
Title: Item Bias Analysis of Functional Status Measures
Institution: INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS, IN
INDIANAPOLIS
Project Period: 2003/05/01-2006/02/28

DESCRIPTION (provided by applicant): Self-report measures of functional status play an important role in group-level research, as well as individual- and group-level clinical assessment. A myriad of functional status tools exist today. Such measures have been developed with rigorous attention to reliability and validity. However, little investigation has been devoted to item bias or differential item functioning (DIF). A person's response to a functional status item should be a result of his/her ability level (the amount of the latent trait s(he) possesses) and nothing else. An item functions differentially if two individuals with equal ability do not have the same probability of item endorsement. Self-report measures of functional status can fall prey to such systematic bias because human beings interpret such items within the context of culturally- and socially-determined mindsets. The purpose of this application is to employ a multi-method approach to identify DIF in widely-used measures of activities of daily living (ADLs) and instrumental activities of daily living (IADLs). We hypothesize that respondent characteristics will interact the content of ADL and IADL items, thereby producing DIF. We will employ techniques of item response theory and other statistical procedures to identify DIF in eight large datasets. Once DIF has been identified, we will employ qualitative methods to discover the potential sources of the DIF. Once the range of causes of DIF has been identified, we will develop practical recommendation for writing new functional status questions to be free of DIF and correcting DIF in existing functional status items. This application will advance our knowledge base about characteristics of items and populations that cause functional status items to exhibit DIF. This contribution will help to bring about necessary change in how scientists develop self-report measurement tools, whether they are for physical or mental assessment. The health outcomes field is transitioning from classical test theory to increasing use of item response theory. Along with that transition will hopefully be more a priori and rigorous attention paid to DIF in instrument development and pretesting phases, rather than after measures have been in long use. This much-needed attention to DIF will result in assessment and outcome tools that are relevant and fair to members of a multicultural society. Thus, this application has broad-reaching implications for advances in item writing, item analysis, test construction, and test evaluation that go beyond the specific ADLs and IADLs we will study.

Grant: 5R01AG019196-02
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MILLER, LISA M.S PHD
Title: Effects of Age, Knowledge, & Control Beliefs on Reading
Institution: BRANDEIS UNIVERSITY WALTHAM, MA
Project Period: 2002/09/01-2007/07/31

DESCRIPTION (provided by applicant): Knowledge is an important component of cognitive functioning and its role is becoming increasingly acknowledged in theoretical work on cognition and intelligence. Because knowledge stores increase with age, researchers have questioned whether the benefits of knowledge can outweigh age-related declines typically found in the mechanics of processing. Some data suggest that the acquisition and the use of knowledge require some effort and therefore could benefit from increased levels of perceived control. Yet it remains unclear how knowledge and control beliefs jointly affect cognitive processing and whether there are age differences in these processes. In light of the research indicating that control beliefs are particularly important among older adults, control beliefs may be an important antecedent of knowledge use among older adults. Three encoding processes that have been identified as possible mediators of the relationship between control beliefs and cognitive performance are persistence, strategy use, and task engagement. The proposed research investigates a mediational model in which the relationships among age, control beliefs, knowledge and memory performance are explored and the mediational role of these encoding processes are considered. The long-term goal of this research is to better understand how knowledge and control beliefs can offset age-related declines in cognitive processing.

Grant: 1R01AG019715-01A2
Program Director: STAHL, SIDNEY M.
Principal Investigator: MINNICK, ANN F PHD
Title: Physical Restraints and Therapy Disruption in Hospitals
Institution: RUSH-PRESBYTERIAN-ST LUKES MEDICAL CTR CHICAGO, IL
Project Period: 2003/04/15-2006/03/31

DESCRIPTION (provided by investigator): Introduction: Numerous adverse consequences (death, fracture, aspiration and delirium) have been reported to be the direct or indirect result of physical restraint (PR). Given PR's serious threat to patient safety, especially that of the elderly, Health Care Finance Administration regulations mandate the restriction of PR use. Although efforts to reduce PR in nursing homes have demonstrated success, the variables associated with hospital PR use have not been identified. Safe PR reduction is of special concern to intensive care unit clinicians because of the real threat to safety posed by patients' premature disruption (e.g. self-extubation) of life sustaining therapies or by falls. Defining the extent and context of PR use and of therapy disruption is hampered by the lack of available national data. Purpose/Aims: This three year prospective study seeks to (1) determine the scope and variation in physical restraint use in non-psychiatric acute care settings, (2) identify the extent to which administratively mediated variables explain PR use variation, and (3) identify the rates, contexts and consequences of therapy disruption for restrained and unrestrained intensive care unit (ICU) patients in the elderly and non-elderly populations. Methods/Design: A three year, prospective unit level study of 40 randomly selected acute care general hospitals in five metropolitan areas (New York, Chicago, Houston, Denver and Phoenix) will include: (A) a PR prevalence and context determination for all non-psychiatric, non-emergency, non-operative, non-long term care units through an 18 randomly selected day observational method (Aim 1) (B) an examination of the ability of selected labor, capital and organizational variables to explain PR use on the three highest usage type units (n=120 units). [Highest usage types are those determined in step A]. (Aim 2) (C) a 90 day prospective study of one adult ICU in each hospital (n=40 units) (Aim 3). Descriptive, correlational, and multi-level statistical analyses will be conducted. Health Related Implications: The results will (1) inform public policy debates related to the priority for further PR reduction efforts (2) assist in the development of effective PR reduction efforts through determination of the role of labor, capital and organizational variables (3) provide information regarding the effectiveness of PR in preventing therapy disruption in ICUs where resistance to restraint reduction is based on provider concerns for patient safety, and (4) help determine the extent and sequelae of therapy disruption to allow for later exploration of its effects on the costs and quality of care.

Grant: 5R01AG012393-09
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MIROWSKY, JOHN I BA
Title: AGING, STATUS, AND THE SENSE OF CONTROL
Institution: UNIVERSITY OF TEXAS AUSTIN AUSTIN, TX
Project Period: 1994/01/01-2005/03/31

Broad objectives. This study aims to describe and explain the relationship between age and changes in the sense of control over one's life. Specific aims. Four preliminary cross-sectional surveys show that the average sense of control declines in successively older age groups beginning in late middle age. The current study measures change in the sense of control over a three-year follow-up period, correlates the changes with age, and tests hypotheses about the form and components of the association. The main hypotheses are: (I) Over a period of time, the sense of control declines by an amount that increases with age; (II) the change in sense of control reflects an underlying change in biosocial function, which accelerates with age; (III) higher social status slows the decline in the sense of control, possibly by preserving biosocial function; and (IV) changes in biosocial function and in the sense of control have deviation-amplifying reciprocal effects that accelerate age-dependent changes in the sense of control. Health relatedness. If Rodin's theory of aging dynamics is correct, a sense of control over one's life increases active participation and improves emotional well-being and physical function, which in turn bolsters the sense of control. Emotional well-being and physical function are health factors themselves, and they decrease subsequent morbidity and mortality. Study design and methods. The study surveys a national sample of persons ages 18 and over. Respondents were selected at random and first interviewed by telephone in late 1994 or early 1995. Persons age 60 and older were over-sampled by 80 percent. The design calls for three waves of interviews three years apart. Collection of the second wave will be complete in Spring of 1998. The application requests continued support for analysis of data from the first two waves, and support for collecting and analyzing a third wave of data. The analyses will specify models that test the hypotheses and address technical issues such as measurement error and non-random attrition.

Grant: 5R01AG014634-17
Program Director: STAHL, SIDNEY M.
Principal Investigator: MITTELMAN, MARY S
Title: AD Caregiver Well-Being Counseling/Institutionalization
Institution: NEW YORK UNIVERSITY SCHOOL OF MEDICINE
NEW YORK, NY
Project Period: 1987/07/01-2004/08/31

A randomized controlled trial of the efficacy of a multifaceted counseling and support intervention for spouse- caregivers of Alzheimer's disease (AD) patients began at the NYU Silberstein Aging and Dementia Research Center (NYU-ADRC) in 1987. A sample of 406 spouse-caregivers (162 husbands and 244 wives) were assigned to either the intervention or a usual- contact control condition. All caregivers are regularly evaluated through home caregiving, nursing home placement, and post-bereavement phases of the caregiving career. The intervention postponed or prevented nursing home placement of AD patients, and minimized many negative consequences of caregiving. Preliminary results also suggest that the intervention leads to lower caregiver mortality. The project has been highly successful in recruiting and retaining study subjects, and in demonstrating the powerful impact of the intervention. More comprehensive longitudinal analyses are now proposed that will evaluate the mechanisms by which the intervention works. We propose to continue to follow all remaining research participants to the predetermined endpoint of the study: two years after the AD patient has died. We will continue to conduct regular assessments of caregiver functioning and AD patient status, and to provide counseling and support services for caregivers in the intervention group. This study is generating a unique longitudinal database. We have already recruited a large sample and have collected many years of data that carefully track the emotional well-being, physical health, and social support resources of spouse-caregivers. Continued funding is essential to complete the construction of this unique data base. In addition, we have forged collaborations with experts in longitudinal caregiving research and social support mechanisms. Latent growth modeling and structural equation modeling will be used to evaluate individual differences in caregiver functioning over time, to test for intervention effects, and to examine gender differences. Major outcome variables include caregiver depression, caregiver physical symptoms, patient institutionalization and caregiver and patient mortality. Change in social support and caregiver appraisals of patient behavior problems are hypothesized to mediate the impact of the intervention condition on these outcome variables. Findings from this study will enable health professionals and policy makers to reduce the socioeconomic impact of AD.

Grant: 5R01AG015778-05
Program Director: STAHL, SIDNEY M.
Principal Investigator: MITTENESS, LINDA S.
Title: SAFE HOUSES: MEANING OF HOME MODIFICATIONS AS SELF CARE
Institution: UNIVERSITY OF CALIFORNIA SAN FRANCISCO SAN FRANCISCO, CA
Project Period: 1999/09/01-2004/02/29

Description (adapted from investigator's abstract): The goal of this project is to better understand how older people interpret safety education materials and decide to make or not make safety related modifications to their home environments. Existing research on home hazard reductions indicates that there are significant hazards in the homes of a great many older people, even after safety education attempts to increase awareness of home hazards, relatively few people act to make home modifications to decrease risk. The discrepancies between professional assessments of home hazards and the assessments of the older person herself or himself and the gap between knowledge of risk and risk mitigation can be partially accounted for by understanding risk as social rather than just individual. We proposed to develop and test a culturally grounded social model of risk identification, evaluation and response. The social model includes an understanding of how past and present events interface with the contemporary context in older people's evaluation of home safety. The proposed study will conduct qualitative research as a "natural experiment" using an already occurring public health effort to identify, describe and analyze: (a) the meanings that older people give to key concepts such as home safety risk and change, (b) the role of stories of other people and information passed among friends in decisions to make or not to make changes, (c) the place of variations in social boundedness and social hierarchies in responses to offers of home modification, and (d) the ways the safety education process contributes to older people's decisions to make home modifications. The study will be done in four economically and ethnically diverse neighborhoods in a large West Coast city, with the goal of identifying variation along lines of SES, age, gender, and ethnicity/cultural group with respect to interpretations of risk, safety, and willingness to undertake home modification.

Grant: 5R01AG020557-02
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MOR, VINCENT PHD OTHER AREAS
Title: State Policies and Hospitalizations from Nursing Homes
Institution: BROWN UNIVERSITY PROVIDENCE, RI
Project Period: 2002/08/01-2005/07/31

DESCRIPTION (provided by applicant): Every 6 months, nearly 25 percent of nursing home residents are hospitalized in the U.S. This figure varies considerably within and between states. In spite of the high cost and iatrogenic problems associated with hospitalizing nursing home residents, and observed inter-state variation, there has been little systematic study of the influence of state policy on these rates and whether this influence may be differential for subgroups of vulnerable residents. Preliminary evidence suggests that states with low Medicaid nursing home payment rates tend to have higher hospitalization rates. A more complete analysis of how state policies affect the strategic clinical and management investment choices nursing homes make should inform the development of more coherent and equitable state and federal policies affecting this highly vulnerable population. Using MDS data and matched Medicare hospital claims for all long stay nursing home residents, in all non-hospital based facilities in the 48 contiguous states merged with facility-level Online Survey Certification Automated Records (OSCAR) data, market-level information from the Area Resource File, and data on state policies, we propose examining the effect of state policies on hospitalization as mediated by nursing homes? investments in medical and managerial resources. The specific aims are: (1) To characterize inter and intra state variation in the long-stay nursing home population, particularly the dually eligible population, in terms of patients? clinical conditions and their concentration. (2) To examine the relationship between state Medicaid nursing home policies and facilities? investment in medically relevant clinical and managerial infrastructure to care for long-stay Medicaid residents. (3) To model the unique association of facility and state-level factors with hospitalization events among long-stay nursing home residents. (4) Using the model developed in (3), to summarize the moderating effects of state Medicaid payment rates and policies on the relationship between facility context and hospitalization for specific sub-populations of long-stay residents: (4a) prevalence of cognitively impaired residents and/or availability of special dementia unit among cognitively impaired residents; (4b) prevalence of African Americans; and (4c) prevalence of dually eligible residents. The results of the proposed study should inform extant theories about how long term care providers respond to exogenous policy shocks, the relative competitiveness of the market and local resource constraints. These theoretical insights will help shape the policy implications emerging from the study.

Grant: 3R01AG020557-02S1
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MOR, VINCENT M
Title: State Policies and Hospitalizations from Nursing Homes
Institution: BROWN UNIVERSITY PROVIDENCE, RI
Project Period: 2002/08/01-2005/07/31

Abstract Text Not Available

Grant: 5R01AG019284-02
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MORGAN, ROBERT O PHD
Title: Medicare + Choice a nd Minority Elderly
Institution: BAYLOR COLLEGE OF MEDICINE HOUSTON, TX
Project Period: 2002/09/30-2005/08/31

DESCRIPTION (provided by applicant): Medicare is specifically mandated to provide health care services to elderly and/or disabled United States residents, as well as those with end stage renal disease. Although Medicare has been successful in dramatically improving both the access to care and the overall health of its constituents, studies have shown inequalities in care associated with the race/ethnicity of Medicare beneficiaries. On the surface, Medicare health maintenance organizations (HMOs) appear to address some of the factors associated with these inequalities, however, the Medicare HMO program, now called Medicare+Choice (M+C), is itself undergoing substantial program changes as a result of the Balanced Budget Act (BBA) and subsequent revisions, e.g., the Balanced Budget Revision Act (BBRA) and the Benefits Improvement and Protection Act (BIPA). This study has two broad objectives. First, we will determine individual level characteristics related to M+C plan enrollment among elderly White, Black, and Hispanic Medicare beneficiaries, whether the factors which elderly Black and Hispanic beneficiaries report as influencing their enrollment in HMOs differ from those that influence elderly White Medicare beneficiaries, and whether elderly Black and Hispanic beneficiaries enrolled in HMOs differ from HMO enrolled elderly White beneficiaries in terms of their self-reported health, use of health care, and perceived access to care. Second, we will examine the availability of Medicare HMOs and benefit packages for beneficiaries of differing race/ethnic classifications, how HMO enrollment rates are related to race/ethnic classification and range of plan benefits, and how the availability of HMOs and HMO enrollment by different race/ethnic groups changed subsequent to implementation of BBA provisions. We will use both survey and population-based (using Medicare administrative data and other population-based data) methodologies to examine individual and system level factors affecting access to and use of medical care, the availability of plans and services, and plan selection by enrollees. This study will provide the first comprehensive examination of both individual and system level factors affecting minority use of the Medicare HMOs, and will provide needed information on how the evolving Medicare system is affecting health care for Black and Hispanic Medicare beneficiaries.

Grant:	3R01AG019284-02S1	
Program Director:	PATMIOS, GEORGEANNE	
Principal Investigator:	MORGAN, ROBERT O	PHD OTHER AREAS
Title:	Medicare + Choice a nd Minority Elderly	
Institution:	BAYLOR COLLEGE OF MEDICINE	HOUSTON, TX
Project Period:	2002/09/30-2005/08/31	

Abstract Text Not Available

Grant: 5R01AG017931-03
Program Director: STAHL, SIDNEY M.
Principal Investigator: MORRIS, JOHN N PHD
Title: PROGRAM HEAL--Activating the Lives of Older Adults
Institution: HEBREW REHABILITATION CENTER FOR AGED BOSTON, MA
Project Period: 2001/09/01-2005/08/31

We intend to implement and test the effectiveness of a comprehensive intervention to prevent functional disability among nursing home residents. The intervention acts by promoting exercise adoption and adherence and reversing institutional factors that cause resident inactivity. Our program, HEAL ('Helping Elders Activate their Lives'), represents an integration of two interventions developed independently from different theoretical models within our institute. A selected exercise component, based on progressive resistance training, promotes behavioral change among nursing home residents, and has been shown to be safe and efficacious in building muscle mass, improving performance-based tests of physical functioning, improving and preventing decline in activities of daily living. The universal nursing-based rehabilitation component targets social and environmental factors contributing to the problem of resident inactivity. We have shown that residents can be helped to be more self-involved in performance of daily activities by targeting behavior of nursing staff and social forces within the facility through training and encouraging a redirection of care planning towards each resident's functional capacity. Each of these interventions has been shown to be efficacious in preventing functional disability when implemented independently. Combined as the HEAL intervention model, the program facilitates the continuity of functional capacity gains resulting from the exercise program into the daily activity of nursing home residents. Making use of existing staffing at three triplets of matched facilities, the intervention will be implemented within the confines of a quasi-experimental trial, involving an estimated 1,350 residents from both randomly assigned experimental exercise only, experimental exercise and nursing based rehabilitation, and usual care control homes. Performance on functional status, and physiologic, mood and self-efficacy measures will be collected at baseline and months 4, 8, 12 and 16 of the intervention. The aim of the proposed study is to establish the effectiveness of this intervention acting in a real world setting. Specifically, we hypothesize that the intervention will act proximally in 1) promoting resident exercise behavior, 2) improve performance on physiologic tests, and 3) act distally to prevent further functional decline and facilitate functional improvement. Further, we anticipate significant carry over effects on mood, well-being, self-efficacy and quality of life outcomes.

Grant: 5R01AG017451-04
Program Director: SHRESTHA, LAURA B.
Principal Investigator: MORROW-HOWELL, NANCY L PHD
Title: COMMUNITY LTC SERVICE AND OUTCOMES--BURDEN OF DEPRESSION
Institution: WASHINGTON UNIVERSITY ST. LOUIS, MO
Project Period: 2000/06/15-2004/05/31

DESCRIPTION (Applicant's Abstract): This study addresses fundamental concerns in community long-term care: ensuring appropriate service in response to a broad range of client needs and understanding factors associated with service outcomes. It is expected that a disproportionate number of public CLTC clients have mental health service needs due to depression, given that depression is associated with both physical dependency and low income. Yet virtually no research has addressed the extent of depression among elders in CLTC nor the impact of depression on CLTC service use and outcomes. Further, little is known about the attitudes of CLTC clients regarding mental health services nor the potential role of CLTC in meeting mental health needs. Study aims are to 1) estimate the extent of depression among elders first entering public CLTC and identify factors associated with depression; 2) determine the service demand in CLTC attributable to depression; 3) determine whether depressed elders experience less benefit from CLTC than do non-depressed elders; 4) examine how CLTC responds to the mental health needs of its clients. The proposed research will survey elders at entry to and through one year of service in Missouri's publicly funded, community long-term care system. Study participants will be 60 years of age or older and eligible for public CLTC services because of low income and functional disabilities. Through a telephone-screening interview, we will assess 1,500 new CLTC clients, documenting the extent and type of depression. We will follow 300 depressed elders as well as a random sample of 300 non-depressed elders through one year of CLTC service use. Subjects will be interviewed and service records will be abstracted to determine the service demand attributable to depression and the extent to which CLTC serves as a gateway to mental health services. Outcomes of CLTC (maintenance in community care, quality of life, life satisfaction, and consumer satisfaction with home care) at six months and one year will be compared for depressed and non-depressed clients to determine the extent to which depression affects the outcomes of CLTC services. Community long-term care is a rapidly growing service sector, and the expansion of home and community care is a priority in the development of long-term care policy. This project has the potential to influence program and policy developments in CLTC. Findings will inform the next step testing interventions that integrate CLTC and mental health services.

Grant: 5R01AG011995-09
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MOSSEY, JANA M BA
Title: QUALITY OF LIFE, HEALTH, AND VALUATION OF LIFE BY ELDERS
Institution: POLISHER RESEARCH INSTITUTE NORTH WALES, PA
Project Period: 1995/01/25-2004/12/31

DESCRIPTION (adapted from the investigator's abstract): The course of frailty and chronic illness will be tracked over 6 years in terms of changes in a set of characteristics that are related to quality of life and potentially to end-of-life attitudes and behavior. The research hypothesizes a cognitive-affective schema, valuation of life (VOL) that is influenced by background factors, health, quality of life, and mental health. VOL is the person's transformations of these inputs and suggested as the major determinant of attitudes and behaviors relevant to the extension versus foreshortening of life. The major hypotheses are that the wish to live is not only decreased by distress but may be incremented by some positive features in the person's daily life. Six hundred elders in good and poor health were recruited for participation in a structured interview, and are beginning the second round of interviews. The present proposal will extend the follow-up period to 6 years, with 270 expected to remain independent, 170 to be ADL-dependent, and 160 to die. Changes over 6 years in Years of Desired Life will be analyzed in terms of changes in health, quality of life, mental health, and VOL. Although multiple comorbidities are the rule, disease-specific trajectories will be sought for 5 illness groups: Congestive heart failure, bowel cancer, diabetes, arthritis, and renal disease among dialysis patients. All analyses will be performed by race (50% African American) and gender. The results will contribute both to clinical practice directed toward the well-being of individuals and to social policy issues where quality of life is involved as a rationale for the distribution of health care costs. A form of religious coping, trusting relationship God, is hypothesized as a moderator of health threat as it influences mental health and VOL.

Grant: 5R01AG018436-04
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MROCZEK, DANIEL K. PHD
Title: PERSONALITY AND WELL BEING TRAJECTORIES IN ADULTHOOD
Institution: FORDHAM UNIVERSITY BRONX, NY
Project Period: 2000/09/15-2005/08/31

DESCRIPTION (adapted from investigator's abstract): The goals of this study are to: (1) estimate the individual differences in personality and well-being change in older adults over time, (2) estimate exposure and determinants of day-to-day events and stressors among older adults, as well as relating these estimates to the longer-term, multi-year trajectories, and (3) examine differences among persons in intraindividual change due to health, life events, and sociodemographic characteristics. The study population is from the VA Normative Aging Study (NAS), a 35-year old study of aging (age range: 49-90 years). Two investigations will be conducted including a new longitudinal data collection over three waves, and combining these data with existing longitudinal data collected from 1975 to 1999. A cohort of women are added, specifically the wives of the NAS men. In the second study, a daily diary design is employed within a subset of NAS husband-wife pairs over an 8-day period. Together, the two studies investigate change and stability in personality and well-being over different periods of time. The fact that most theories on well-being and personality focus on change or stability at the personal level coupled with research at the sample level, only modeling intraindividual change will reconcile this discrepancy. The multi-year study will allow the examination of change and stability in personality traits and well-being, whereas the 8-day diary study permits the examination of state variability in stressors and affective components of well-being. Individual growth modeling to estimate intraindividual trajectories and hierarchical modeling to evaluate the impact of immediate stressors and day-to-day affect will be employed respectively. Gender and personality influences on daily variation will also be examined. Husband-wife personality interrelationship will be examined. Day-to-day variability (e.g., affect) will be examined as potential predictors of multi-year personality and well-being trajectories. With this study a better understanding of why some people change and why some do not will be achieved.

Grant: 5R01AG017555-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: MUKAMEL, DANA B PHD
Title: STRUCTURE, PROCESS AND OUTCOMES IN THE PACE PROGRAM
Institution: UNIVERSITY OF ROCHESTER ROCHESTER, NY
Project Period: 2000/06/01-2004/05/31

DESCRIPTION (Applicant's Abstract): The Program of All-Inclusive Care for the Elderly (PACE) is a community-based alternative to nursing home care for frail elderly who have significant functional and/or cognitive impairments. It is a managed care program that integrates primary and long term care services with acute care. Rapid expansion of the PACE program is anticipated as a result of the Balanced Budget Act of 1997. The innovative care approach adopted by the PACE program holds the promise of higher quality care, better health outcomes and lower costs compared to care offered to frail elderly enrolled in traditional Medicare and Medicaid programs, or managed care programs. Past studies demonstrated that PACE compares favorably with Medicare fee-for-service care. They have also shown that there is significant variation in health outcomes across sites. This suggests that quality of care in PACE could be improved further. The causes for these variations, and the specific program characteristics associated with them, have not been studied to date. The objective of this study is to identify opportunities for improvements by investigating the links between programs' structure, process and risk-adjusted health outcomes. The study will include 26 PACE sites currently in operation. Individual level data about health outcomes and participants' risks at admission will be used to create risk adjusted outcome measures of quality for each site. Four outcome measures will be developed, based on mortality, changes in functional status, changes in self assessed health status and hospitalizations. These data will be linked to site level data that characterize the structure and process of care in each site. Data about structure and process will be obtained from the National PACE database and from surveys and site visits. Structure and process dimensions will include: Participant characteristics, e.g., health and functional status, ethnicity, family support; Providers' characteristics, e.g., staff turn over, specialty mix, measures of team interactions; Organizational characteristics, e.g., relationship with sponsoring organization, risk sharing, maturity of the site; and External environmental influences, e.g., area practice styles, competition. Statistical regression techniques will be used to test hypotheses about the links between structure, process and outcomes. The knowledge gained from this study would have direct bearing on efforts to improve care in PACE programs, as well as implications for other programs serving frail, non-institutionalized elderly.

Grant: 1R01AG020644-01A2
Program Director: STAHL, SIDNEY M.
Principal Investigator: MUKAMEL, DANA B PHD
Title: Racial Disparity in Access High Quality Cardiac Surgeons
Institution: UNIVERSITY OF CALIFORNIA IRVINE IRVINE, CA
Project Period: 2003/09/30-2006/08/31

DESCRIPTION (provided by applicant): Racial disparities in access to high quality cardiac surgeons among the elderly Racial disparities in access to health care services is a well documented, if poorly understood, persistent characteristic of the American health care system. Inadequate access to services by racial minorities, as it leads to poor health outcomes and poor health, has become an important part of our national health policy agenda. Racial minorities have been shown to be less likely to receive cardiac surgery. Even when they gain access to surgery, they are still disadvantaged because they access surgeons with higher risk-adjusted mortality rates (RAMR), compared to whites. These issues are of particular importance to the elderly population, as heart disease is one of the major morbidities in this population, it is the leading cause of death and over 50% of CABG surgeries are performed on individuals aged 65 and older. The proposed study is designed to test specific hypotheses about the factors contributing to the observed disparities in access to high quality cardiac surgeons. It will test hypotheses related to three referral decisions foci: the patient, the referring physician and the managed care organization (MCO). The population studied will include all Medicare patients undergoing CABG surgery, all cardiac surgeons and hospitals in NYS. Medicare CABG patients will be surveyed about their use of RAMR information and their encounter with the referring physician. Medicare claims for medical care encounters prior to the surgery will be used to analyze referral patterns. NYS SPARCS data and MCO information, as well as a unique data set with information about contracting patterns of MCOs with hospitals and cardiac surgeons, will be used to study the effect of MCOs on racial disparities in access. Statistical multivariate regression techniques will be used to analyze the data. The knowledge gained in this project is essential for development of targeted programs that could successfully address the disparity in access to high quality cardiac care among elderly racial minorities.

Grant: 1R01AG021648-01A1
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: MURAMATSU, NAOKO PHD
Title: STATE LONG TERM CARE POLICIES AND ELDERLY WELL-BEING
Institution: UNIVERSITY OF ILLINOIS AT CHICAGO CHICAGO, IL
Project Period: 2003/08/01-2007/07/31

DESCRIPTION (provided by applicant): Elderly persons with functional limitations face long term care (LTC) policy alternatives that are largely determined at the state level. States vary greatly in their efforts to transform LTC systems that rely almost exclusively on institutional services to those that provide services in alternative settings including home and community-based services (HCBS). The proposed study has two broad objectives: (1) to investigate how trajectories of LTC use and well being among elderly persons vary, as a function of state level policies and across cohorts, and (2) to obtain in-depth understanding of state LTC policy contexts. The first objective will be achieved in Part I of the proposed study, which centers on multilevel modeling of state-level LTC policies and individual-level trajectories of LTC use and well being. The analysis will use longitudinal data from the Health and Retirement Study (HRS, 1993, 1995, 1998, 2000, and 2002) and National Long-Term Care Survey (NLTCs, 1989, 1994, and 1999), which will be merged with state-level LTC policy data, using the state identifiers available in the HRS and NLTCs data sets. Since LTC policies and the characteristics of elderly cohorts needing care change over time, Part I also involves the compilation of state-level LTC policy data that cover the survey years of HRS and NLTCs as well as multiple cohort analysis. The second objective will be achieved in Part II, which consists of case studies of 2 states (New York and Illinois). Both states are similar in that they have a major metropolitan area with diverse populations as well as large upstate or downstate rural areas, but differ markedly in terms of political background, LTC systems, HCBS expenditures, and programs/services offered. In-depth state policy contextual information will be obtained through site visits (interviews with state officials, LTC provider associations, advocacy group representatives and other stakeholders) and from public documents, websites, and electronic data files. In addition, trajectories of LTC utilization and well being among HRS and NLTCs respondents of the 2 states will be described and compared. Part I and Part II will proceed simultaneously to inform each other throughout the four-year study period.

Grant: 5R01AG019105-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: MURRAY, MICHAEL D MPH
Title: IMPROVING DRUG USE FOR ELDERLY HEART FAILURE PATIENTS
Institution: PURDUE UNIVERSITY WEST LAFAYETTE WEST LAFAYETTE, IN
Project Period: 2000/09/30-2004/08/31

DESCRIPTION (adapted from investigator's abstract): Older adults with chronic heart failure need assistance with their medications to facilitate medication adherence and improve their health outcomes. Adherence decreases in patients who have complicated medication regimens. Recent expert guidelines for the treatment of heart failure recommend that patients receive as many as four to five medications. Furthermore, many older adults with heart failure must regularly administer and manage additional drugs for their other chronic diseases. Although medications have been shown to reduce morbidity and mortality of patients with heart failure, patients must reliably take them to derive any benefits. A particular concern in the United States is that during the past decade rates of hospitalization and death have disproportionately increased in elderly patients with heart failure. Recent studies suggest that the outcomes of patients with heart failure improve when pharmacists provide patients with education and monitoring. Drawing upon our recent studies of pharmaceutical care for patients with chronic diseases, we aim to develop and test a multileveled pharmacy-based program to improve the care of patients with heart failure. The program is built upon two models: (1) a social-cognitive model for medication adherence, and (2) a behavioral model of healthcare utilization. We have designed patient education materials and medication packaging that have been specifically formatted to promote comprehension by older adults. Using these materials, a schema for instruction for use by a pharmacist, and a computer that is integrated into an electronic medical record system, we will conduct a randomized controlled trial. Elderly patients (N=244) with heart failure will be assigned to usual care or to intervention by a pharmacist equipped with the designed educational support and integrated computer. The study duration will be 12 months: 9 months of active intervention and 3 months of post-intervention follow-up. Adherence will be assessed using electronic monitoring of all medications for heart failure. Endpoints of the trial will include health-related quality of life, heart failure exacerbation, patient satisfaction, and healthcare costs. We hypothesize that the pharmacy-based program will result in improved adherence to heart failure medications, which will be accompanied by improved health-related quality of life, fewer exacerbations of heart failure, greater satisfaction with care, and reduced health care costs.

Grant: 5R01AG019155-03
Program Director: ELIAS, JEFFREY W.
Principal Investigator: MUTTER, SHARON A BS
Title: Contingency Learning and Judgment in Older Adults
Institution: WESTERN KENTUCKY UNIVERSITY BOWLING GREEN, KY
Project Period: 2001/09/15-2006/08/31

The ability to acquire and use knowledge about the relationships or contingencies that exist between events in the environment is the foundation of adaptive behavior, enabling us to predict, explain, and control the events in our lives. Given the importance of this information for behavioral adaptation, even small age-related declines in sensitivity to environmental contingencies could lead to less adjustment in novel situations and to restrictions in everyday activities. The acquisition and use of contingency information involves fundamental learning and memory processes that are known to change with age. This research addresses the question of whether these changes produce specific patterns of impaired and intact performance in older adults' contingency learning and judgment. Three studies are proposed. The first two studies focus on "data-driven" contingency judgments that follow the acquisition of novel event relationships. The experiments in Study 1 investigate whether age-related decline in working memory resources affects older adults' ability to acquire and use novel contingency information and whether reducing demands for working memory at encoding and retrieval improves this ability. The experiments in Study 2 investigate whether age-related changes in explicit learning and memory processes lead older adults to experience greater deficits in the explicit acquisition and recollection of novel contingency information than in the implicit acquisition and use of this information as a basis for improving performance. The experiments in Study 3 focus on "theory-driven" contingency judgments. These experiments examine whether an age-related decline in the ability to inhibit the intrusion of pre-existing beliefs and expectancies leads older adults to assign greater weight to their own potentially obsolete or irrelevant contingency knowledge than to novel environmental contingencies. Together, the experiments in these three studies will provide a comprehensive view of older adults' ability to acquire, retrieve, and use contingency information for judgment and prediction.

Grant: 5R01AG017619-02
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: NEUMARK, DAVID PHD
Title: Incentive Effects of Supplemental Security Income (SSI)
Institution: NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Project Period: 2002/02/01-2004/12/31

DESCRIPTION (provided by applicant): We propose to study the incentive effects of the Supplemental Security Income (SSI) program for the aged on their work effort and saving activity in the years shortly before the program eligibility age of 65. The long-term objectives of our research plan are two-fold. The first is to substantially increase knowledge about the impacts of SSI on the work and saving behavior of the elderly poor and near-poor by utilizing data sources-the Health and Retirement Study (HRS) and the Current Population Survey (CPS)-that offer important advantages and enable a richer description of the effects of SSI than we have obtained using data from the Survey of Income and Program Participation (SIPP). The second is to explore the patterns of use of the SSI and Social Security Early Retirement (SSER) programs. With regard to the latter objective, interactions between these programs, including the effect that the design of one program has on the desirability of participation in the other, are of particular interest. Four specific projects aimed at achieving these long-term objectives will be carried out. The first examines the robustness of our earlier findings and extends our previous analysis using alternative data sources, testing the hypotheses that likely future SSI recipients work and save less when SSI is more generous. The second uses the HRS's longitudinal framework to examine the actual time patterns of the work effort and saving of individuals, and to address other econometric issues exploiting the longitudinal framework. The third enriches our previous methodological approach by modeling the joint determination of work effort and savings behavior of likely future participants as they approach the eligibility age for SSI. The fourth recognizes that SSER benefits may be an important financial resource for individuals nearing age 65 who plan to participate in SSI, and therefore tests the hypothesis that likely future SSI recipients are often able to reduce their work effort because of the SSER program. This project also examines whether SSI policy encourages SSER use by nullifying the early retirement actuarial reduction in the Social Security benefit that normally accompanies SSER. This occurs for the elderly poor when SSI determines their net government old age transfer at the margin.

Grant: 5R01AG017578-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: OBERMEYER, CARLA M
Title: THERAPEUTIC DECISIONS AT MENOPAUSE--A MULTISITE STUDY
Institution: HARVARD UNIVERSITY (SCH OF PUBLIC HLTH) BOSTON, MA
Project Period: 2000/09/30-2005/08/31

DESCRIPTION: The proposed project is a multisite study of therapeutic decisions around the menopause transition. It combines epidemiological and ethnographic approaches to analyze the factors that influence the prescribing practices of providers, and those that account for the choices made by women regarding the use of biomedical and alternative therapies. The project is designed to make systematic comparisons across four countries that differ in terms of sociocultural and health service factors known to influence the symptomatology of menopause, the meaning attached to it, and the medical and non-medical options available to cope with this life transition. The study is based on surveys and interviews with health providers and with representative samples of women aged 45-55 in 4 study sites (Massachusetts, Morocco, Lebanon, and Iran). Data are analyzed using a combination of statistics for quantifiable data, and qualitative methods for ethnographic data. The first phase of the analysis is carried out for each country separately, while the second part consists of comparative analyses of data across countries. The long-term objective of the research is to contribute to the formulation of appropriate policies regarding the management of menopause by providing evidence on the diversity of therapeutic choices, elucidating the reasons for their variations within and across countries, and clarifying the complex process of decision making for women and providers.

Grant: 3R01AG020072-02S1
Program Director: SHRESTHA, LAURA B.
Principal Investigator: OFSTEDAL, MARY B BA
Title: Comparative Study of Health Transitions in Later Life
Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI
Project Period: 2001/09/30-2004/08/31

DESCRIPTION (provided by applicant): This proposal is one of two parallel submissions from separate institutions constituting a single project. The Principal Investigators are: Zachary Zimmer, Population Council, and Mary Beth Ofstedal, University of Michigan. The overall goal of the project is to describe and analyze health transitions and health care utilization patterns in four Asian countries undergoing rapid population aging and social and economic change. The study involves comparative analyses of recent panel surveys of older populations in Taiwan (1989-1999), Indonesia (1993, 1997, 1998), the Philippines (1996, 2000-2001), and Singapore (1995, 1999). The Asian panel surveys represent the first nationally-representative, longitudinal data available on the older population for these countries, which span a continuum of socioeconomic development. The comparative approach allows for estimates of how the potential demand for care and support varies between countries (i.e., prevalence and transitions in health outcomes) and how generalizable the links are between socioeconomic status, social support and health that have been observed in many developed nations in the West. The project has three specific aims: (1) to estimate population prevalence levels of health outcomes (functional limitation, chronic conditions, and self-assessed health status), examine recent trends in prevalence levels within countries, determine individual-level transition rates in health status, and estimate active life expectancy; (2) to investigate the effects of socioeconomic status and family network characteristics and social support on health status transitions among older adults; and (3) to assess the roles of access and need as determinants of health care utilization by examining individual-level and community resource characteristics. A variety of analytic techniques will be employed depending on the form of the dependent variable and the goal of the particular analysis. Logistic regression models will be utilized in analyses of prevalence of health outcomes and changes in prevalence levels, and a combination of logistic and linear regression techniques will be used in analyses of health care utilization. Multinomial logit models will be used for analyses of health transitions; active life expectancy will be examined using multistate life tables for different population subgroups, and structural equation models will be used to test for cross-lagged effects of socioeconomic status and health.

Grant: 5R01AG020072-03
Program Director: SHRESTHA, LAURA B.
Principal Investigator: OFSTEDAL, MARY B BA
Title: Comparative Study of Health Transitions in Later Life
Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI
Project Period: 2001/09/30-2004/08/31

DESCRIPTION (provided by applicant): This proposal is one of two parallel submissions from separate institutions constituting a single project. The Principal Investigators are: Zachary Zimmer, Population Council, and Mary Beth Ofstedal, University of Michigan. The overall goal of the project is to describe and analyze health transitions and health care utilization patterns in four Asian countries undergoing rapid population aging and social and economic change. The study involves comparative analyses of recent panel surveys of older populations in Taiwan (1989-1999), Indonesia (1993, 1997, 1998), the Philippines (1996, 2000-2001), and Singapore (1995, 1999). The Asian panel surveys represent the first nationally-representative, longitudinal data available on the older population for these countries, which span a continuum of socioeconomic development. The comparative approach allows for estimates of how the potential demand for care and support varies between countries (i.e., prevalence and transitions in health outcomes) and how generalizable the links are between socioeconomic status, social support and health that have been observed in many developed nations in the West. The project has three specific aims: (1) to estimate population prevalence levels of health outcomes (functional limitation, chronic conditions, and self-assessed health status), examine recent trends in prevalence levels within countries, determine individual-level transition rates in health status, and estimate active life expectancy; (2) to investigate the effects of socioeconomic status and family network characteristics and social support on health status transitions among older adults; and (3) to assess the roles of access and need as determinants of health care utilization by examining individual-level and community resource characteristics. A variety of analytic techniques will be employed depending on the form of the dependent variable and the goal of the particular analysis. Logistic regression models will be utilized in analyses of prevalence of health outcomes and changes in prevalence levels, and a combination of logistic and linear regression techniques will be used in analyses of health care utilization. Multinomial logit models will be used for analyses of health transitions; active life expectancy will be examined using multistate life tables for different population subgroups, and structural equation models will be used to test for cross-lagged effects of socioeconomic status and health.

Grant: 5R01AG016335-03
Program Director: ELIAS, JEFFREY W.
Principal Investigator: OTT, BRIAN R MD
Title: A LONGITUDINAL STUDY OF HAZARDOUS DRIVERS WITH DEMENTIA
Institution: MEMORIAL HOSPITAL OF RHODE ISLAND PAWTUCKET, RI
Project Period: 2001/09/15-2005/08/31

This protocol describes a longitudinal research project which will examine changes in on-road driving performance and changes in {cognition} among actively driving subjects with Alzheimer's disease. It is well recognized that dementia is a risk factor among the elderly for motor vehicle crashes and fatalities. Degenerative dementias such as Alzheimer's disease, because of their progressive nature, eventually lead to driving incompetence in all cases. A critical question that faces clinicians in everyday practice is when to advise patients with early disease to abstain from driving. Because patients with Alzheimer's disease may still be competent to drive if their dementia is in its earliest and mildest stage, and because driving is an important factor in maintaining autonomy for elders, licenses should not be revoked based on arbitrary decisions about one's memory ability. Annual road testing for driving competence of all elders or even all elders with dementia is neither practical nor economical. Therefore, an effective screening instrument is badly needed. Knowledge about the actual driving impairments that occur in dementia patients that lead to hazardous driving and how they relate to changes in neuropsychological function over time is critical to the development of a valid screening tool. Drivers with early stage Alzheimer's disease will be enrolled in this study and followed every six months over {two to} three years. A recently validated road test protocol will be administered by a professional driving instructor. {Computerized} neuropsychological tests of visual perception, visual attention, and executive function will be administered concurrently. It is predicted that the earliest evidence of driving impairment will be associated with disturbances {in visual perception and attention.} In more advanced stages of dementia, when subjects are most likely to be judged as incompetent drivers, there will be prominent deficits in executive function as well. The longitudinal design of this study will give important insights into the evolution of driving impairment among AD patients and assist in the future development of screening tests to identify hazardous drivers who would be likely to fail a performance based road test.

Grant: 3R01AG016209-03S1

Program Director: SHRESTHA, LAURA B.

Principal Investigator: PALLONI, ALBERTO PHD SOCIOLOGY:SOCIOLOGY-UNSPECIFIED

Title: HEALTH CONDITIONS OF ELDERLY PUERTO RICANS

Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI

Project Period: 2000/06/15-2004/05/31

DESCRIPTION (Adapted from the Applicant's Abstract): The proposed project will collect and analyze information on health conditions, living arrangements, transfers, and access to and use of health care among older adults (aged 60+) in Puerto Rico. We propose an island-wide, cross-sectional sample survey of target individuals and their surviving spouses or partners. The baseline survey will be complemented by (a) a single follow-up to take place two years after the baseline survey; (b) record linkages with Medicare and other insurance providers; (c) record linkage with certificates of decedents who die between in the inter-wave period; and, (d) a sample of targets' siblings for the analysis of paired survival times. The data the investigators propose to collect can be used to addresses the following goals: (i) to describe health conditions of adults 60+ in general, and of those 80+ in particular, with regard to self-reported health conditions, physical and mental impairment, and functional disability; (ii) to assess the effects of socioeconomic conditions and migration histories on health status, physical and mental impairment, functional disability, rates of institutionalization and mortality risks; (iii) to assess relations between self-reported chronic conditions, functional disability, mortality and institutionalization, and background conditions, including migration experience. (iv) to assess relations between individuals' history of illness, behavioral risks, and shared environments, on the one hand, and chronic diseases, disability, mortality and institutionalization, on the other; (v) to identify risk profiles based on functional limitations, self-reported conditions, and risky behavior and use them as inputs for short-term forecasting of age-patterns of morbidity, disability, and mortality, (vi) to evaluate elderly's access to and use of health care services, including those supplied outside the formal medical establishment; (vii) to investigate the sources, magnitude and direction of intergenerational support, as well as the activity of kin networks, as a function of elderly' health status; (ix) to establish comparisons with information about Puerto Ricans in the US and other Hispanics and, with proper modeling techniques based on spouse and siblings data, to obtain robust estimates of effects of socioeconomic effects and migration experience. This will help to shed light on the seemingly favorable health conditions of Hispanics living in the US (NRC1997).

Grant: 5R01AG011564-08
Program Director: STAHL, SIDNEY M.
Principal Investigator: PAVALKO, ELIZA K PHD
Title: WORK AND HEALTH AMONG MID-LIFE WOMEN
Institution: INDIANA UNIVERSITY BLOOMINGTON BLOOMINGTON, IN
Project Period: 1994/04/01-2005/02/28

The second half of the twentieth century has been marked by a dramatic influx of women into the paid labor force, but we are only beginning to understand the implications of this shift for women's health. This continuation study will investigate the effects of employment on women's physical health, focusing in particular on how this relationship may change as women move through midlife and how it may vary across four birth cohorts. Specific aims of the study are to: 1) examine the measurement properties and explore analytic techniques for a multiple item index of physical mobility limitations; 2) explore age and cohort changes in women's employment; 3) test whether there is age and/or cohort variation in the effect of employment on physical health; and 4) decompose each type of variation and investigate causes of each source of variation in the work-health relationship. The Mature and Young Women's cohorts of the National Longitudinal Surveys (NLS) will be used for these analyses. These data provide nationally representative samples of multiple birth cohorts of U.S. women over a fourteen to seventeen year period spanning the 1970's and 1980's. When combined, these two data sets provide one of the few nationally representative data with long-term longitudinal information on multiple cohorts of U.S. women. Analyses will use confirmatory factor analysis, fixed effects longitudinal regression models, and multilevel models in various stages of the analyses. Findings will contribute to basic research on health measurement and will further our understanding of social processes that may lead to earlier onset or progression of women's mobility limitations. Examining changes in the work-health relationship as women age and variations across birth cohorts also contributes to our understanding about how intersections of aging and social change may impact women's physical health.

Grant: 5R01AG017461-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: PEARLIN, LEONARD I. PHD
Title: STATUS INEQUALITY, STRESS, AND HEALTH AMONG OLDER PEOPLE
Institution: UNIVERSITY OF MARYLAND COLLEGE PK COLLEGE PARK, MD
CAMPUS
Project Period: 2000/09/15-2004/08/31

The proposed research calls for three interviews at yearly intervals with a sample of 1,200 people 65 years and older residing in three Maryland counties. Its general aim is to account for the association between people's socioeconomic statuses (SES) and their health and well-being. In addition to age, these statuses include economic level, education, occupational prestige, marital status, gender, and race and ethnicity. The study is guided by the perspectives of the stress process conceptual framework. The specific aims of the inquiry essentially involve empirical tests of several interrelated assumptions underlying this conceptualization. Thus, it is assumed that SES potentially influences the nature and intensity of stressors to which people are exposed. Certain types of stressors, such as loss events, can become particularly prevalent in late life. Moreover, it is thought that exposure to one or more serious stressors may generate exposure to additional stressors, a phenomenon referred to as stress proliferation. Exposure to both initial and proliferated stressors, in turn, can lead to a variety of physical and mental health outcomes; in this way, stressful life conditions stand as one of the mechanisms linking SES and health. However, exposure to stressors does not always have a deleterious effect on health. It is proposed that even under difficult life conditions certain kinds of social and personal resources, such as social support and the sense of mastery, can protect individuals from these effects. It is further proposed that the particular health outcomes that are manifested under conditions of stress will vary with the SES characteristics of people.

Grant: 2R01AG010175-10A1
Program Director: ELIAS, JEFFREY W.
Principal Investigator: PEDERSEN, NANCY L PHD
Title: Genetic & Environmental Influences-Biobehavioral Aging
Institution: UNIVERSITY OF SOUTHERN CALIFORNIA LOS ANGELES, CA
Project Period: 1992/09/18-2007/08/31

DESCRIPTION (provided by applicant): The primary purpose of the proposed research is to extend the longitudinal behavioral genetic study of aging known as SATSA (the Swedish Adoption/Twin Study of Aging) with a longitudinal follow-up 16 years after the initial in-person testing of 485 individuals from approximately 350 twin pairs, allowing for up to 5 times of in-person testing per subject. In addition, the study will obtain a fifth wave of self-report data on the 1471 individuals who have ever participated in any form of SATSA assessment and are still living. The point at which any participant shows onset of cognitive impairment or dementia as well as mortality information will be linked to the dataset. Of principal interest are analyses of genetic and environmental contributions to individual differences in long-term change and continuity late in life with respect to measures of cognition and health, including health related behavior. Analyses within domains will focus on the trajectory of change with age, investigation of whether age changes differ by cohort, and identifying the most informative predictors of survival. Analyses between domains will investigate the nature of the relationships between cognitive and health variables, as well as examining the direction of effect and the genetic and environmental contributions to the observed relationships. Specific hypotheses about the nature of these relationships will be tested. With an expanded number of measurement occasions as well as the cohort sequential design of the study, we will have an unprecedented opportunity to evaluate issues concerning patterns of aging, including turning points after which decline accelerates, how patterns of decline are related to mortality (terminal decline), which changes precede others, and what factors appear to precipitate or to protect against decline. The explication of individual differences in aging has basic research implications for increased understanding of the fundamental processes of normal and pathological aging, as well as applied implications for treating disorders, preventing disease, and optimizing quality of life.

Grant: 1R01AG021089-01A1
Program Director: STAHL, SIDNEY M.
Principal Investigator: PEEK, M KRISTEN PHD
Title: Health Concordance in Older Mexican American Couples
Institution: UNIVERSITY OF TEXAS MEDICAL BR GALVESTON, TX
GALVESTON
Project Period: 2003/07/01-2006/06/30

DESCRIPTION (provided by applicant): Individuals who are married tend to have lower mortality, morbidity, and better mental health. The potential protective effect of marriage on both physical and mental health is of particular importance to older couples as the number of older married adults rises and mortality rates continue to decrease. However, there is very little information on the connection between the health statuses of older married couples. The similarity between health of spouses, or "concordance" can be of particular importance if the deterioration in the health of one spouse is associated with the deterioration in the health of the other spouse. One way to address concordance is to examine the connection between one spouse's health events and the other spouse's health outcomes. To address the association between spouses' health more extensively, we intend to examine the potential influence of physical functioning and health events in one spouse on the health of the other spouse over a 2-5 year time period in older Mexican American adults. The specific aims of the study are: (1) to examine the relationship between the presence of major health events (myocardial infarction, stroke, cancer, and hip fracture) in one spouse and depressive symptoms and lower body mobility of the other spouse; (2) to assess the connection between physical functioning (e.g., I/ADL disability) in one spouse and depressive symptoms and lower body mobility of the other spouse; and (3) to investigate the association of mortality of one spouse with depressive symptoms and lower body mobility of the other spouse. As a secondary aim, we will explore the possibility that social support and acculturation modify the relationship between spouses' health statuses in older Mexican Americans. We will be examining these specific aims in 553 married couples from the ongoing Hispanic Established Populations for Epidemiologic Studies of the Elderly (H-EPESE). One of the benefits of examining concordance in spouses' health in older Mexican Americans lies in their health profiles (mortality rates similar to older White adults but higher rates of certain diseases and disability). Structural equation modeling will be used for model estimation on three waves of data (1993-94 -1998/9.)

Grant: 1R01AG024049-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: POLLAK, ROBERT A PHD
Title: Long-Term Care and Intergenerational Resource Allocation
Institution: WASHINGTON UNIVERSITY ST LOUIS, MO
Project Period: 2003/09/30-2006/08/31

DESCRIPTION (provided by applicant): Concerns about the potential erosion of the family as a support network have prompted a variety of public policy proposals designed to influence the dynamics of family support. A better understanding of the process by which families come to assume and share the responsibility of caring for their disabled elderly members is essential for designing and evaluating long-term care policies. Our first aim in this study is to develop a dynamic, game-theoretical model of intergenerational family decision making that accounts for interactions among family members. Using a sequential three-stage game, we examine living arrangements choices (the disabled elderly parent lives independently in the community, in a nursing home, or resides with one of her children), children's transfers of time and cash to the parent, inter vivos transfers from the parent to each child, and parental use of formal care. Our framework explicitly accounts for the presence of multiple players and the role of government in providing untied (e.g., Social Security) and tied (e.g., Medicare) transfers to elderly persons and their caregivers. Our second aim is to test two key implications of the model: (i) The relative bargaining power of an adult child who coresides with her disabled parent will be reduced relative to non-coresident siblings and (ii) family living arrangement decisions will be influenced by expected transfers by all children and policy variables, including the form (in-kind versus cash), targeting (elderly persons versus caregiver), and generosity of government programs. These implications will be tested empirically by using difference-in-difference techniques (relative bargaining power hypothesis) and a simultaneous, multi-equation, endogenous switching model (expected transfer hypothesis). The empirical work will take advantage of panel data available for a nationally representative sample of elderly parents and their adult children (Assets and Health Dynamics of the Elderly/Health and Retirement Survey). Results from these analyses will provide important insights into the efficiency of intergenerational living and care arrangements and the distributional effects of alternative government long-term care policies.

Grant: 1R01AG021971-01
Program Director: STAHL, SIDNEY M.
Principal Investigator: PORTER, EILEEN J PHD
Title: Old Homebound Women's Intention of Reaching Help Quickly
Institution: UNIVERSITY OF MISSOURI COLUMBIA COLUMBIA, MO
Project Period: 2003/09/01-2007/06/30

DESCRIPTION (provided by applicant): The purpose of this in-depth, extended phenomenological study is to describe the experience of reaching help quickly (RHQ) for old homebound women who live alone. Annually in the U.S., about 300,000 persons over age 65 who live alone are unable to contact help after a fall or an incapacitating illness. For the many women aged 85 and older who live alone, the public health impact is critical. They perceive a risk of falling and not being found, so they intend to get helpers to the home quickly, but very few subscribe to the personal emergency response system (PERS) that is designed to help them do so. Variations in the experience of RHQ have not been described. The aims are: (1) To detail the intentions that describe the personal experience of each woman in relation to RHQ and to describe any changes in her intentions that occur over 18 months; (2) To describe the personal, environmental, and socio-cultural context of each woman's experience of RHQ and to consider any changes in context over 18 months in relation to any changes in her intentions; and (3) To discern the phenomena of the experience of RHQ for the sample and to compare the component phenomena of the experience for PERS subscribers and non-subscribers. The PI's descriptive phenomenological method will be used to guide data gathering and data analysis. The sample of 40 homebound women over the age of 85 will be stratified into Group #1 (n = 24, non-PERS subscribers) and Group #2 (n = 16, PERS subscribers). Over 18 months, five tape-recorded interviews will be done with each woman in her home; the women's SAFETY AND use of space in the home and their perceptions of their support networks relative to RHQ will be ASSESSED. Descriptive taxonomies of the structure of RHQ and its context will be produced. In line with the PI's research program, the long-term aims of the project are to disseminate new perspectives on old homebound women's health-related experiences, to generate further research topics, and to offer practical ideas to enable these vulnerable women to live at home more safely.

Grant: 6R01AG013469-06
Program Director: STAHL, SIDNEY M.
Principal Investigator: QUANDT, SARA A BA
Title: RURAL ELDERS: ETHNICITY, FOOD MEANING & DIET MEASUREMENT
Institution: WAKE FOREST UNIVERSITY HEALTH WINSTON-SALEM, NC
SCIENCES
Project Period: 1996/09/30-2005/01/31

This study builds on the investigators' ongoing research of gender and ethnic differences in nutritional self-management of older adults in two rural North Carolina counties (RO1 AG 13469) to investigate the meanings and beliefs rural older adults have for food, diet and the relationship of food and diet to health. This study addresses the problem of using such information to adapt existing dietary instruments to more accurately collect nutrient and food intake data. This study will: (1) document older rural adults' meanings of foods and their cognitive models of nutrition; (2) compare and contrast food meanings and cognitive models of nutrition by ethnic group (African American, Native American, European American); and (3) identify cultural and socioeconomic predictors of differences in food meanings and cognitive models of nutrition that result in health disparities. Based on what is learned in the first three specific aims, this study will: (4) use the food and diet meanings to adapt two existing dietary intake instruments to be more culturally appropriate for this population; and (5) evaluate the new dietary intake instruments. The research is divided into 2 phases. Phase I data collection includes individual in-depth and group interviews. In-depth individual interviews will be completed with 48 African American, European American and Native American females and males aged 70 and older who reside in two rural North Carolina counties. Respondents will be asked to discuss their beliefs about different foods, their knowledge and beliefs about several nutritional categories (e.g., fat, fiber), and the connections between diet and foods and specific physical conditions (e.g., diabetes, cancer). Twelve group interviews will be conducted that include 96 older African American, European American and Native American females and males. Group participants will discuss the investigators' interpretations of food, diet measurement procedures and perform validation tests. Participants will include 120 older African American, European American and Native American males and females. These participants will complete six 24 hour diet recall interviews over a six month period, which will be used to validate the adapted Food Frequency Questionnaire and Meal Pattern Questionnaire.

Grant: 5R01AG017587-03
Program Director: STAHL, SIDNEY M.
Principal Investigator: QUANDT, SARA A BA
Title: RURAL ELDERS' DIABETES SELF MANAGEMENT--ETHNIC VARIATION
Institution: WAKE FOREST UNIVERSITY HEALTH WINSTON-SALEM, NC
SCIENCES
Project Period: 2001/03/01-2005/02/28

DESCRIPTION: Older adults with diabetes who properly self-manage this disease can decrease their risk of severe complications and age more successfully. Diabetes and diabetic complications are major causes of mortality and morbidity; they are often devastating for patients and extremely costly to the health care system. Diabetes disproportionately affects minority populations, making it a major source of health disparity. While specific self-management intervention programs exist, members of rural and ethnic minority populations have little access to such programs and programs may not be culturally appropriate. Few programs are designed to meet the special needs of elderly populations. Little research has considered diabetes self-management strategies used by older adults, particularly older rural and minority adults. This project focuses on the self-management strategies used by rural older adults of different ethnicities (African American, Native American, European American) to manage Type 2 diabetes. The research combines survey and qualitative methods to produce an in-depth understanding of self-management. The specific aims are to: (1) document the diabetes self-management strategies of community-dwelling rural older adults with Type 2 diabetes; (2) compare and contrast the diabetes self-management strategies of older adults by ethnic group; (3) identify cultural, social, economic, and life course predictors of and barriers to diabetes self-management; and (4) evaluate diabetes self-management strategies of older adults using a series of psychosocial and functional measures. This study will be guided by a conceptual framework of health self-management based on the investigators' ongoing work, and it will be conducted in 2 rural counties where the investigators have established a successful presence. The study has 2 components. Component 1 is a survey of 482 adults, aged 65 and older with diagnosed Type 2 diabetes. This sample will be equally divided among the 6 gender-ethnic groups, and it will be drawn using HCFA files. A computer assisted personal interview will be used to collect background characteristics, personality, self-management resources, self-management activities and outcome measures (e.g., Hemoglobin A1C, depression, quality of life). Component 2 includes in-depth interviews with 15 experts who provide diabetes services, and 48 older adults with diabetes. Expert selection will be based on the investigators' knowledge of the counties; older adults will be selected from the survey sample and include equal numbers by gender, ethnicity and glucose control. In-depth interview data will be used to explore the community context for diabetes self-management, as well as the processes by which older adults develop and maintain a self-management strategy. Multivariate techniques will be used in the analysis of the survey data. A systematic approach will be used to analyze the qualitative data.

Grant: 5R01AG016308-03
Program Director: SHRESTHA, LAURA B.
Principal Investigator: RAHMAN, MOHAMMED O DSC
Title: SOCIAL NETWORKS AND ADULT SURVIVAL IN RURAL BANGLADESH
Institution: HARVARD UNIVERSITY (SCH OF PUBLIC HLTH) BOSTON, MA
Project Period: 2001/07/15-2004/06/30

This study will use newly collected, comprehensive data from rural Bangladesh to (a) investigate the impact of social networks on adult and elderly survival and (b) explore the variation in social networks amongst individuals. Its contributions include the following: First, unlike most previous studies which have used ad hoc, atheoretical, uni-dimensional summary network measures to represent social networks, this study will use a theoretically driven, empirically validated, multidimensional model of social networks. Specifically it will examine the relationship of network characteristics to survival within distinct social and kin roles (spouse, sons, daughters, brothers, sisters, other members of the residential compound (the bari), and confidant), recognizing that some roles may be more important than others. Second, it will address concerns about the universality of the relationship between social networks and adult survival across sociocultural settings by examining this issue in the context of a rural developing world setting. Third, the extensive sociodemographic information available will permit us to explore how different individual characteristics such as gender, age, income and education may modify the impact of social ties on survival, an area that has received inadequate attention thus far. Fourth, because of the wide variety of health status indicators available (self-reported and measured), we will be able to control for the confounding effect of prior health in a more comprehensive way than many studies. Fifth, this study will explore the extent to which social networks act as stressors versus buffers. Sixth, we will attempt to gain insight into the mechanisms through which social networks may affect survival, with a special focus on instrumental support exchanges. Finally, this study will use both a cross-sectional and a longitudinal approach to investigate how social networks vary across individuals, focusing on different conceptualizations and facets of networks.

Grant: 5R01AG020263-02
Program Director: CHON-LEE, ANGIE J
Principal Investigator: RICKLEFS, ROBERT E. PHD
Title: Demographic Aging in Captive Birds and Mammals
Institution: UNIVERSITY OF MISSOURI-ST. LOUIS ST. LOUIS, MO
Project Period: 2002/02/01-2005/01/31

DESCRIPTION (provided by applicant): This project takes advantage of a unique data resource to characterize variation in rates of aging in captive populations of vertebrates (mammals, birds, and reptiles) in zoological institutions. We define rate of aging as the increase in mortality rate as a function of age, or actuarial senescence (AS). Previous analyses have shown that AS in both natural and captive populations of mammals and birds varies by nearly an order of magnitude and that mortality resulting from aging processes is generally similar in natural and zoo environments. This suggests that aging-related mortality results primarily from unique intrinsic causes of death (e.g., vascular disease, malignancies, autoimmune disease) rather than increasing vulnerability to extrinsic causes of mortality (predation, accident, contagious disease, weather-related starvation) owing to general deterioration of physiological function. Demographic patterns of aging will be compared by analyzing data in the International Species Information System (ISIS), which is the major international data base for zoological institutions. The data include age at death, reproductive history, and genealogy. We use the Weibull function to quantify actuarial senescence. Rate of AS for each species will be related to other aspects of life history, including sex, early experience (wild versus zoo born), body mass, brain mass, metabolic rate, development period, age at maturity, diet, and mortality rates in the wild. We shall additionally determine whether birds exhibit reproductive menopause and whether a trade-off exists between reproduction and aging. Ages at death will be compared among siblings and half-siblings to estimate its heritability. Medical records of zoos will be analyzed to determine how causes of death change with age. The ultimate goals of this study are to establish a comparative database for actuarial senescence in captive populations of vertebrates, to identify model organisms for further research on the physiology of aging, and to determine the feasibility of involving zoological institutions in collaborative, non-invasive research on aging.

Grant: 5R01AG015071-05
Program Director: ELIAS, JEFFREY W.
Principal Investigator: RIZZO, MATTHEW PHD
Title: DRIVING IN OLD AGE, ALZHEIMERS DISEASE AND STROKE
Institution: UNIVERSITY OF IOWA IOWA CITY, IA
Project Period: 1999/06/01-2004/05/31

DESCRIPTION: Car crashes result in great individual suffering and costs to society. Many fatal crashes are caused by faulty driving, and special concerns have been raised about drivers with Alzheimer's disease (AD) and stroke, the two most common causes of cognitive decline in individuals over 60 years of age (the fastest growing segment of the American population). Even though both of these disorders can impair mental abilities crucial to the driving task, surprisingly few reliable criteria are available for deciding who is likely to drive safely and who is not, and few effective probes exist to measure and classify relevant abilities and impairments. The primary purpose of these proposed studies is to identify valid and pragmatic off-road measures of cognitive and visuospatial abilities that can be used to predict safe and unsafe driving abilities in elderly drivers at risk for impairments. A comprehensive approach to evaluating automobile driving in at-risk drivers is developed, through the study of neuropsychological test performances, State driving records, and driving performance in both driving simulator and an instrumented vehicle. The instrumented vehicle ARGOS was designed to measure critical aspects of driver control on the field, under conditions that cannot be reproduced in a laboratory, and without the bias of a road test graded by a human observer. Predictions on driver fitness in neurologically impaired older drivers also will be independently derived from and significantly enhanced by studies conducted on a driving simulator. High fidelity simulations on the Iowa Driving Simulator, the most advanced facility of its type, allow us to present computer-controlled scenarios that look, sound, and feel like the actual experience of driving over real terrain, yet are more reproducible than an actual road test. By implementing high-fidelity simulated collision avoidance scenarios, we can safely infer crash risk through direct observations of driver behavior in emergency situations that cannot otherwise be evaluated, including "fatal" safety errors in the final moments preceding a crash. We will study 165 community dwelling older adults (ages 60-80) who are legally licensed and still actively driving. This includes 110 drivers with cognitive deficits (N=55 due to AD and N=55 due to stroke), and 55 drivers without neurological disease. By analyzing the driving performance of these drivers in the simulator, on-the-road in ARGOS, through a comprehensive battery of "off-road" cognitive and visuoperceptual tests, and with respect to actual State driving records, we will objectively determine which performance factors best discriminate between safe and unsafe drivers. One of the ultimate goals of this line of research is to develop fair and accurate criteria to predict driving ability in elderly populations at risk for cognitive disability.

Grant: 5R01AG020247-02
Program Director: SHRESTHA, LAURA B.
Principal Investigator: ROBERT, STEPHANIE A PHD
Title: Community Context & Health Over the Life Course
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 2002/09/01-2006/07/31

DESCRIPTION (provided by applicant): The overall goal of this study is to better understand how socioeconomic and racial disparities in health, well-being, and mortality are produced and maintained by both community and individual processes over the life course. This study uses multilevel data to examine the relationship between community socioeconomic context, racial segregation, and individual health, well-being, health change, and mortality. The Specific Aims of this study are: 1) To examine how community socioeconomic context and racial segregation are jointly and independently associated with individual health, well-being, health change, and mortality. 2) To examine how community socioeconomic context and racial segregation are associated with individual health, well-being, health change, and mortality independent of individual/family SES, through individual/family SES, and to examine how these relationships are moderated by individual/family SES over the life course. 3) To examine how the relationships between community socioeconomic context, racial segregation, and health, well-being, health change, and mortality vary by age, race, and gender. 4) To create and test a conceptual model that (a) describes the complex pathways through which community context is related to individual health and well-being, including an emphasis on the subgroups for whom these relationships appear most salient, and (b) demonstrates specific pathways that appear to be dominant mediators and moderators of these relationships. This study uses three national studies of adults in the U.S. (Americans' Changing Lives Study--Waves 1, 2, 3, and 4, Midlife in the U.S. Study, and the National Survey of Families and Households--Waves 1 and 2) that each have information on individual and family SES, individual health, well-being, and mortality (2 of the 3 studies). Each also includes information on some of the individual-level pathways (health behaviors, social support, stress, access to health care, perceived neighborhood environment) that may link community context and individual socioeconomic status to health, well-being, health change, and mortality over the life course. Information from the census is matched for respondents in each study to measure the socioeconomic context (from census tracts or zip codes, and counties) and racial segregation (county level) of the communities in which respondents reside.

Grant: 5R01AG021178-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: ROBERTS, BRENT W PHD
Title: Longitudinal Studies of Conscientiousness and Health
Institution: UNIVERSITY OF ILLINOIS URBANA- CHAMPAIGN, IL
CHAMPAIGN
Project Period: 2002/09/15-2007/08/31

DESCRIPTION (provided by applicant): Despite established Links to longevity, the role of conscientiousness in the health process has not been systematically studied, nor have the effects of aging on the relationship between conscientiousness and health been investigated. Two longitudinal studies are proposed to test the relationship between conscientiousness and the social environmental factors and health-related behaviors that contribute to health and longevity. Pilot data are reported which suggest that a comprehensive model of conscientiousness is linked to many of the health behaviors and social environmental factors that contribute to health and longevity. Also, data is presented showing significant increases in conscientiousness and decreases in risky health behaviors with age. Building on these initial findings, the proposed research has three aims. The first aim is to fully delineate the relationships among conscientiousness, health-related behaviors, and the social environmental factors that affect health and longevity using multiple methods. The second aim is to test how age affects the relationships among conscientiousness, health-related behaviors, and social environmental factors. The third aim is to perform follow-up assessments of two age-stratified samples in order to test the relationship between changes in conscientiousness and changes in the health behaviors and social environmental factors that contribute to better health. The proposed research is significant for four reasons. First, conscientiousness, through its relationship to health behaviors and social environmental factors, may be one of the most important, yet under-appreciated contributors to positive health outcomes across the life course. Second, the effect of age on the relationship of conscientiousness to these health factors is unknown and the proposed studies will provide the most definitive test of the effect of aging on these relationships. Third, increases in conscientiousness across the life course may facilitate even greater improvements in health behaviors and social environmental factors that, in turn, contribute to positive health outcomes. And fourth, this research will allow us to identify the social environmental factors that promote increases in conscientiousness and decreases in risky health behaviors.

Grant: 3R01AG018177-04S1
Program Director: ELIAS, JEFFREY W.
Principal Investigator: ROGERS, WENDY A BA
Title: TASK STRATEGIES, AGING AND SKILL ACQUISITION
Institution: GEORGIA INSTITUTE OF TECHNOLOGY ATLANTA, GA
Project Period: 1999/09/15-2004/08/31

DESCRIPTION (adapted from investigator's abstract): Older adults acquire new skills more slowly and less successfully than young adults. Why? One possibility that has received minimal empirical attention is that older adults' approach to the task (i.e., their strategy) may be different from young adults'. Preliminary research suggests that older adults do adopt different task strategies, such strategy differences do mediate age-related differences in skill acquisition, and the strategy use of older adults can be influenced by the structure of the task. The proposed research is designed to answer the following questions: (1) When do older adults use different strategies in skill acquisition tasks? (2) What are the mechanisms that underlie differential strategy use? (3) Is strategy selection of older adults amenable to change, or is it strictly limited by cognitive and speed abilities? (4) Can training and task structure be designed to enable older adults to use the optimal strategy? (5) How can strategy differences be incorporated into a general theory of age-related differences in skill acquisition? Twelve experiments are proposed to investigate strategy issues for young and older adults for a range of skills including perceptual learning, memory-based associative learning, and more complex skills such as learning to use an automatic teller machine and learning to make logic decisions. The proposed effort consists of three experimental series to systematically pursue the goals of identifying and understanding age-related differences in strategy selection, strategy use, and strategy adjustment. First, the costs and benefits of prior practice will be determined to assess the influence of nonspecific transfer on skill acquisition. Second, practice schedule manipulations will determine how task training should be structured to facilitate use of efficient strategies for learning. Third, the flexibility of strategy selection will be assessed with the goal of identifying the task components that lead to optimal strategy choice. The results of the proposed research will yield basic empirical data for a model of age-related differences in skill acquisition as well as practical information about how and when such age-related differences can be minimized through task design or appropriate training.

Grant: 5R01AG018177-05
Program Director: ELIAS, JEFFREY W.
Principal Investigator: ROGERS, WENDY A DRPH
Title: TASK STRATEGIES, AGING AND SKILL ACQUISITION
Institution: GEORGIA INSTITUTE OF TECHNOLOGY ATLANTA, GA
Project Period: 1999/09/15-2004/08/31

DESCRIPTION (adapted from investigator's abstract): Older adults acquire new skills more slowly and less successfully than young adults. Why? One possibility that has received minimal empirical attention is that older adults' approach to the task (i.e., their strategy) may be different from young adults'. Preliminary research suggests that older adults do adopt different task strategies, such strategy differences do mediate age-related differences in skill acquisition, and the strategy use of older adults can be influenced by the structure of the task. The proposed research is designed to answer the following questions: (1) When do older adults use different strategies in skill acquisition tasks? (2) What are the mechanisms that underlie differential strategy use? (3) Is strategy selection of older adults amenable to change, or is it strictly limited by cognitive and speed abilities? (4) Can training and task structure be designed to enable older adults to use the optimal strategy? (5) How can strategy differences be incorporated into a general theory of age-related differences in skill acquisition? Twelve experiments are proposed to investigate strategy issues for young and older adults for a range of skills including perceptual learning, memory-based associative learning, and more complex skills such as learning to use an automatic teller machine and learning to make logic decisions. The proposed effort consists of three experimental series to systematically pursue the goals of identifying and understanding age-related differences in strategy selection, strategy use, and strategy adjustment. First, the costs and benefits of prior practice will be determined to assess the influence of nonspecific transfer on skill acquisition. Second, practice schedule manipulations will determine how task training should be structured to facilitate use of efficient strategies for learning. Third, the flexibility of strategy selection will be assessed with the goal of identifying the task components that lead to optimal strategy choice. The results of the proposed research will yield basic empirical data for a model of age-related differences in skill acquisition as well as practical information about how and when such age-related differences can be minimized through task design or appropriate training.

Grant: 1R01AG024058-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: ROGOWSKI, JEANNETTE A PHD
Title: NEIGHBORHOODS AND THE HEALTH OF ELDERLY AMERICANS
Institution: RAND CORPORATION SANTA MONICA, CA
Project Period: 2003/09/30-2008/08/31

This project is coordinated with P50 ES012383, Nicole Lurie, "UNDERSTANDING NEIGHBORHOOD IMPACTS ON HEALTH."

This project investigates how contextual factors, specifically the built and socioeconomic features of neighborhoods, affect the health of elderly Americans. Neighborhood characteristics may influence the health of elderly persons in two principal ways: through direct contemporaneous effects on health status and functioning, or through cumulative effects from earlier points in the lifecourse. Because many neighborhood features are modifiable, identifying changes in those aspects of neighborhood environment with the greatest influence on health could become important in addressing health disparities and improving health overall. Understanding at what points in the lifecourse the neighborhood environment most affects health will further inform interventions to reduce disparities in health and functioning in old age.

Unfortunately, there is a paucity of literature on how these contextual factors affect late-life health and functioning. The few existing studies of the elderly are based on small sample sizes drawn largely from confined geographic areas and are thus of limited generalizability. We propose to undertake a national study of the effect of neighborhoods, both built and social environments on health and functioning in old age. The study has the following aims: 1) to measure the effects of the built and social environment on the health and health trajectories of the elderly, with a focus on identifying those neighborhood features that have the most impact on health and are amenable to policy interventions; 2) to understand how and at what points neighborhood environments from earlier in life influence health in old age; and 3) to examine whether neighborhood features have differential impacts on important subpopulations of the elderly, such as men and women, people with low socioeconomic status, and racial/ethnic minorities.

The study will use two nationally representative panel data sets, the Health and Retirement Survey (1992-2002) and the Panel Study of Income Dynamics (1968-2003). These data sets contain large samples of elderly persons that are representative of the elderly population of the United States. Neighborhood characteristics, derived from the work of the Center's data core, will be merged with the individual level data at the census tract level.

Grant: 1R01AG023380-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: ROSS, CATHERINE E PHD
Title: Education, Resource Substitution, and Health
Institution: UNIVERSITY OF TEXAS AUSTIN AUSTIN, TX
Project Period: 2003/09/30-2006/08/31

DESCRIPTION (provided by applicant): The aim of this research is to examine the conditions under which education is more or less beneficial to health. The association between education and health is well-established, but whether the strength of this association depends on other social statuses is not. We propose to develop and test a theory of "resource substitution" which states that education's influence on health is greater for person's with fewer alternative resources than it is for the more advantaged. We focus mainly on three disadvantaged socioeconomic statuses, representing disadvantaged social origins (low parental education), individual socioeconomic disadvantage (low income) and neighborhood disadvantage (indexed by the prevalence of poverty, mother-only households, college education, and home ownership). The first precedes ones own educational attainment, and the other two follow from it. We also examine a number of other disadvantaged statuses that could modify the effect of education on health, including parental divorce, female gender, minority status, lack of full-time employment, and perceived neighborhood disorder. We will compare the hypotheses derived from resource substitution theory with the alternative (which we call "resource multiplication") which suggests that the influence of education is health is greater for persons with more resources. Finally we will examine mediators of the moderators, ff education has a larger effect on health for the disadvantaged, why does it? We will analyze data from our two longitudinal surveys, "Aging, Status, and the Sense of Control" (ASOC; U.S. sample) and "Community, Crime, and Health" (CCH; Illinois sample). We measured self-reported health, physical functioning, chronic conditions, and psychological symptoms; the potential mediators and moderators of the education-health association; detailed information about education; and, in CCH, linked census data on respondents'neighborhoods. We will model the changes in health with subsequent and concurrent change models, structural equation models with latent factors, self-amplifying latent curve models, and multilevel models.

Grant: 5R01AG016340-05
Program Director: ELIAS, JEFFREY W.
Principal Investigator: RUBIN, DAVID C PHD
Title: MEMORY, LANGUAGE, CULTURE
Institution: DUKE UNIVERSITY DURHAM, NC
Project Period: 1999/09/01-2004/08/31

Description (adapted from investigator's abstract): A common anecdotal report of older adults is that they remember events that occurred when they were younger better than more recent events. When this reversal of a normal monotonic retention function is examined carefully, either by asking for life stories or by cuing individual autobiographical memories with words, older adults do indeed remember more events from when they were 10 to 30 years old. This "bump" phenomenon is one of the few cognitive effects of aging that is not a decrement in performance. It has many explanations that have resisted being teased apart using standard techniques of cognitive psychology. However, by examining people who migrated at various points in their lives, changing language, culture, and environment, we propose to separate classes of explanations. A central aspect of autobiographical memory is language, yet little work has examined whether memory, or discourse of any kind, is easier to retrieve in the language in which it was encoded. Yet a few studies with young adults, clinical data from psychotherapeutic treatment, and the introspections of older bilinguals indicate that it is. By examining the memories of people who migrated and learned a second language at different times (and those who did not migrate or learned both languages simultaneously, or know only one language), we can examine such questions. Since many older adults are bilinguals who have changed their relative competence in their languages over their lifespans, and even more have made major migrations, this work has practical as well as theoretical interest for the nature of language and memory in adult development. Tasks include a narrative and a word-cued autobiographical memory procedure, and a bilingual language assessment. Participant populations recruited to help separate effects include adult Hispanics who migrated to either Anglo or Hispanic communities in the US, Poles who were granted asylum in Denmark, monolingual non-migrating matched controls, and older monolingual adults who migrated within the US to non-retirement communities, age segregated retirement communities, and long-term care facilities.

Grant: 1R01AG021112-01A1
Program Director: STAHL, SIDNEY M.
Principal Investigator: RUBINSTEIN, ROBERT L PHD
Title: Experience of Suffering in Old Age
Institution: UNIVERSITY OF MARYLAND BALT PROF BALTIMORE, MD
SCHOOL
Project Period: 2003/08/15-2007/05/31

DESCRIPTION (provided by applicant): The general aim of this proposed 48-month qualitative, anthropological study is to examine the experience The general aim of this proposed 48-month qualitative, ethnographic study is to examine the experience of suffering among elders and its relation to health, gender, and ethnicity. Persons largely experience suffering through immersion in a profoundly difficult event or episode. Suffering may be closely related to one's core sense of identity. While elders in general are better educated, of higher income, more active, healthier, and less disabled than in previous decades, many elders have experienced profound suffering in such events as illness, loss, depression, pain, racism and poverty life course disappointment, family conflict and existential crisis. Others, born abroad, may have experienced difficult events connected with war, genocide, migration, and displacement, suffering may be shaped in relation to other characteristics and events such as the nature of illness, affiliation with a particular spiritual tradition or gender. The view of suffering taken here is based on prior research, that suffering is profoundly personal and subjectively irreducible (as with all elements of personal meaning). Suffering is best studied through close examination and attention to contexts and qualities of experience. The ability to "tell about" suffering to another is useful in such an examination. For purposes of this study, suffering will be defined in a general way as a direct or vicarious negative experience that is intense, prolonged and painful in some way, that is usually a non-normal condition of being, that challenges everyday, taken-for-granted realities, and that forces or shapes some re-evaluation of personal meaning or sense of identity. In the proposed research, four specific aims are offered. Research will consist of multi-part ethnographic interviews with 180 elders stratified by ethnicity, gender, and self-rated health. Not all informants will have experienced suffering firsthand, Data analysis will be undertaken, involving the development of a text base and use of standard qualitative data analytic techniques.

Grant: 5R01AG018299-03
Program Director: ELIAS, JEFFREY W.
Principal Investigator: RUDY, THOMAS E PHD COUNSELING /
PSYCHOLOGY
Title: Chronic Pain in the 65+: Evaluating Functional Impacts
Institution: UNIVERSITY OF PITTSBURGH AT PITTSBURGH PITTSBURGH, PA
Project Period: 2001/09/15-2005/08/31

Chronic pain plagues approximately 50 percent of community dwelling older adults, and may cause significant disruption of physical, psychosocial, and cognitive function. Despite the prevalence of this potentially devastating problem, well-controlled studies of chronic pain in older adults that use a comprehensive multidimensional model are lacking. Chronic low back pain (CLBP) is among the most common chronic pain conditions of older adults, affecting approximately 6 million individuals in the United States who are greater than or equal to age 65. CLBP offers a robust model with which to study the comprehensive functional effects of chronic pain in the older adult because of the reliable and valid measures of observed physical capacity, self-reported disability and pathology that have been developed specifically for patients with low back pain. The purpose of this investigation is to broaden our understanding of disability in the older adult with chronic pain. Specifically, we will explore (1) the magnitude of the effect of CLBP on physical, psychosocial, and cognitive functioning in 200 community dwelling older adults greater than or equal to age 65 as compared with 200 pain-free control subjects, (2) the impact of CLBP associated psychosocial and neuropsychological dysfunction on physical function, and (3) whether older adults with chronic pain can be classified using a multi-axial taxonomy that has been demonstrated in younger chronic pain patients. The laboratory-based physical capacities testing protocol is designed to assess body mechanics, endurance and coordination using ergonomically relevant tasks (e.g., lifting, reaching). Other comprehensive multidimensional assessment measures will include those that have particular relevance to older adults, such as pain intensity, clinical measures of physical performance, disability, sleep, mood, self-efficacy, detailed measures of neuropsychological function, and self-perceptions of health and well-being. This study represents the first well-controlled, comprehensive examination of the effects of chronic pain on individuals who may be most threatened by the risk of functional decline, that is, community dwelling older adults. Once the effects of chronic pain have been comprehensively described, only then can effective treatment programs be developed to help ameliorate the suffering of these older Americans.

Grant: 1R01AG023217-01
Program Director: SHRESTHA, LAURA B.
Principal Investigator: RUTAREMWA, GIDEON PHD
Title: MORTALITY DIFFERENTIALS IN UGANDA IN THE ERA OF HIV/AIDS
Institution: MAKERERE UNIVERSITY KAMPALA,
Project Period: 2003/09/15-2006/08/31

DESCRIPTION (provided by applicant) This project proposes to analyze mortality correlates in Uganda during the HIV/AIDS period. The project builds on prior work to analyze the levels, trends and patterns of - childhood mortality, and extends to examine adult mortality and maternal health aspects. The projects seek to take advantage of all existing survey and census data as well as the improved demographic methods to examine an important health and demographic dynamic. This project seeks to contribute to knowledge and expand understanding of the changing Ugandan health and morbidity environment in the face of the HIV/AIDS epidemic. The proposed study will provide empirical analysis of the demographic dimensions of one of the main outcomes of health during the 20 years since AIDS was first reported in Uganda.

Grant: 5R01AG008055-15

Program Director: ELIAS, JEFFREY W.

Principal Investigator: SCHAIE, K W
PHD GEN/EXP
PSYCH:GEN/EXPER PSYCHOL-
UNSPEC

Title: LONGITUDINAL STUDIES OF ADULT COGNITIVE DEVELOPMENT

Institution: PENNSYLVANIA STATE UNIVERSITY-UNIV UNIVERSITY PARK, PA
PARK

Project Period: 1988/12/05-2005/03/31

The Seattle Longitudinal Study (SLS) has been a major resource for monitoring age and cohort trends in adult cognitive development, providing normative data for assessment instruments used with older adults, exploring the causes of individual differences in aging, and assessing the effects of targeted cognitive interventions within the context of a longitudinal study. It is currently funded through 1998 to study the relation between health histories and maintenance of cognitive functioning, to provide another (1998) followup of the longitudinal panels, a 7-year follow-up of a family study, and 7- and 14-year follow-ups of the cognitive training studies. It also includes the administration of a neuropsychological battery, ApoE testing of 700 subjects over the age of 60, and recruitment of subjects for eventual autopsy. The present continuation proposal has four sub-components: (1) Completion of the 7th wave data collection. Funding is sought for the assessment of a new 7th wave of 840 subjects as well as for the analyses based on the currently funded follow-up data collection in the longitudinal study. (2) Neuro-psychological assessment obtained on older panel members over age 60 will be repeated in 3-year intervals in 2000 (N = 500) and 2003 (N = 400) to obtain measures closer to subjects' death. (3) Health histories of longitudinal panel members will be updated through 1998 to assess changes in behavior-disease relationships over time. (4). Family Studies. The second generation members will be reassessed to obtain data over a 14-year period (N = 800) and data will be collected on 600 grandchildren of the original panel member to allow studies of multi-generational family similarity in cognition. Blood samples will be obtained for ApoE genotyping and lipid profiles.

Grant: 1R01AG021950-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: SCHNEEWEISS, SEBASTIAN MD
Title: Effects of income-based drug charges on older Patients
Institution: BRIGHAM AND WOMEN'S HOSPITAL BOSTON, MA
Project Period: 2003/09/01-2007/05/31

DESCRIPTION (provided by investigator): Policies to contain prescription drug costs in the elderly are widely debated because they will impact heavily on the health of older Americans as well as affect the fundability of federal and statewide programs of drug coverage for the elderly. Many coverage plans include annual deductibles that require the patient to pay 100% of drug costs out-of-pocket until a predefined deductible limit is reached. Income-based deductibles set these limits to vary directly with the patient's income status. Although we have shown earlier that some drug cost containment methods can result in net health care savings without adverse outcomes in an elderly population (R01-HS10881), it remains unclear to what extent income-based deductibles may adversely affect adherence to chronic drug therapy and health outcomes in elderly and poor patients. Based on our earlier work we propose to study the clinical and economic consequences of an income-based deductible policy in a large-scale natural experiment in the province of British Columbia. Starting January 2003, all residents 65+ (about 500,000) will be subjected to such a policy. We will use longitudinal data analysis for linked individual-level health care data describing medication use, other health care use, and clinical events in all such patients. Additional analyses will implement patients' self-report in a subgroup of patients. We will focus on specific drug classes and chronic conditions that are prevalent in elderly patients in which a dose reduction or discontinuation would be most important, or likely cause measurable adverse health effects. The project will produce the first data describing the clinical and economic consequences of such a cost-containment policy in a large and stable population of older patients. It will also analyze savings for drug benefit plans and the impact of financial contributions by patients. Its findings will be of great importance for the ongoing debate over proposed programs for drug coverage in the elderly and will provide a set of refined recommendations and tools for planning, implementing, and executing future policies. A separate dissemination component will bring together researchers and policymakers from a variety of settings to review these findings and assess their relevance to emerging research and policy issues related to drug therapy for the elderly.

Grant: 1R01AG024048-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: SCHOLZ, JOHN K PHD
Title: Determinants and Consequences of Family Transfer
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 2003/09/30-2006/08/31

DESCRIPTION (provided by applicant): If supported, this three-year project will develop new theoretical and empirical models to better understand the timing, magnitude, and consequences of intergenerational transfers. Our theoretical work will develop models that can better match empirical facts about the timing of transfers within the family, and can help explain the prevalence of "tied" educational and housing transfers. We also develop potentially innovative ways to assess circumstances under which cooperative models better match behavior than non-cooperative models. Better underlying behavioral models of intergenerational transfers will enhance researchers'and policy-makers'understanding of intergenerational linkages within families, human capital formation of young Americans, and the way public policies and families interact to affect behavior. Our proposed empirical work focuses on 1) the role of tied transfers in understanding college attendance and graduation, 2) empirical tests of the implications of cooperative models of transfers, 3) the effects of retirement on inter-vivo transfers, 4) the effects of estate and gift tax changes on inter-vivo transfers, and 5) the joint estimation of inter-vivo transfers of time and money and related projects exploring the degree to which transfers are compensatory. The empirical projects test specific implications of new behavioral models of intergenerational transfers, and hence can demonstrate (or falsify) their ability to better understand behavior. Equally importantly, we address practical policy questions about the degree to which retirement affects transfers, about the effects of estate and gift taxation on inter-vivos transfers, and about the degree to which families efficiently allocate resources across family members. Our empirical work will be based on complementary transfer questions from the Health and Retirement Study (and AHEAD), the Wisconsin Longitudinal Survey (WLS), and the Surveys of Consumer Finances. The co-investigators are helping to design new transfers information in the 2003 wave of the WLS and are ideally situated to analyze these data.

Grant: 5R01AG019604-04
Program Director: ELIAS, JEFFREY W.
Principal Investigator: SCHWARTZ, BRIAN S. MD
Title: EXPLAINING DISPARITIES IN COGNITIVE FUNCTION IN SENIORS
Institution: JOHNS HOPKINS UNIVERSITY BALTIMORE, MD
Project Period: 2000/09/30-2005/08/31

DESCRIPTION (Taken from the Investigator's Abstract) Cognitive function (CF) is central to daily functioning and quality of life. The life course trajectory in CF is known to vary by race/ethnicity and socioeconomic status (SES), and this variation involves a complex causal web. Unpacking this causal web has important political, social, and public health implications, and provides a foundation for prevention and for ensuring social equity. However, we have only a rudimentary understanding of the factors that mediate these disparities in CF. The causal web is complex and involves such diverse and possibly interrelated domains as genetic, social, behavioral, environmental, contextual factors, and individual vascular health. The direct and indirect contributions of these diverse factors must be considered in trying to explain variation by race/ethnicity and SES, moving beyond the traditional but somewhat limiting exploration of "gene-environment interactions" by more broadly defining the underpinnings of these disparities. Ubiquitous potential causes of a decline in CF in older adults include lead exposure, apolipoprotein E (ApoE) genotype, vascular risk factors (i.e., blood pressure), and health-compromising behaviors (e.g., inactivity and smoking). Importantly, a number of genes known to differ by race/ethnicity appear to influence the toxicokinetics or toxicity of lead, including those for the 8-aminolevulinic dehydratase (ALAD), vitamin D receptor (VDR), Na/K ATPase (NKATP), and ApoE genes. Disparities in CF must be examined using next-generation data and methods that allow the modeling of the causal structure of these multiple domains, and to see how and to what extent social, behavioral, and contextual factors are important mediators and moderators along an extended causal pathway. Only by testing this more complete model, will it be possible to fully explicate the complex multilevel associations that pattern everyday life. The goal of this research is to understand the direct and indirect influences of lead absorption, four specific genes, individual social and behavioral factors, contextual factors, and blood pressure in accounting for the associations of race/ethnicity and SES with CF and cognitive decline. The investigators propose a five-year prospective study of 900 urban residents, aged 50 to 70 years, randomly selected from specific geographic areas with variation in race/ethnicity and SES. All study subjects will have three visits at 16-month intervals, with measurement of cognitive function, blood pressure, tibial lead, patellar lead, individual social and behavioral factors, current and past contextual factors, and ALAD, VDR, NKATP, and ApoE genotypes.

Grant: 5R01AG016311-05
Program Director: STAHL, SIDNEY M.
Principal Investigator: SCOGIN, FORREST R PHD
Title: QUALITY OF LIFE AND OLDER RURAL HEALTH CARE RECIPIENTS
Institution: UNIVERSITY OF ALABAMA IN TUSCALOOSA TUSCALOOSA, AL
Project Period: 1999/09/01-2004/07/31

DESCRIPTION (adapted from investigator's abstract): This is a resubmission of a previously reviewed project. Older rural home health care recipients are a group overlooked in gerontological research. These persons experience significant problems with emotional well-being and decrements in quality of life that are not being adequately addressed by existing resources. The present study will investigate the effectiveness of a psychosocial intervention for improving the quality of life of these frail and sick elders. The treatment will be delivered in the homes of the care recipients and the primary family caregiver will participate in the therapy as a facilitator. Improved quality of life and emotional well being should result in the care recipient's reduced use of health care services. Aim 1 of the study is to test the efficacy of a brief, in-home psychosocial treatment in improving the quality of life of rural home health care recipients. The treatment will be delivered by clinical social workers and will entail the provision of 16 sessions of cognitive-behavioral therapy. Family caregivers will attend therapy sessions and will facilitate the therapy by providing reminders, prompts and assistance to the care recipients in implementing therapeutic tasks. A delayed treatment control group design will be used to evaluate effectiveness of the treatment package on measured quality of life and emotional well-being. The investigators will also assess whether teaching problem solving skills and using the caregiver as treatment facilitator has a positive effect on such factors as caregiver burden and the caregiver care recipient relationship. Aim 2 of the study is to assess the effects of the intervention on the home health care recipient's use of home health care services. The conceptual framework on which the intervention is based posits that improvements in quality of life and emotional well being will mediate decreases in health care use. This model will be empirically evaluated through the assessment data collected in this study. Aim 3 is to investigate the success of efforts to make the intervention responsive to white and African-American home care recipients. One-half of the participants, as well as half of our therapists and research assistants, will be African-American. It is expected that there will be no differences in the effectiveness of the intervention among African-Americans and white participants. The research team is interdisciplinary and includes two clinical geropsychologists, a doctoral level clinical social worker, a nurse scientist (Ph.D.) and a geriatrician. The investigators have prior experience, publications, and preliminary data on the implementation of treatment protocols with older adults, community caregivers, and rural dwelling home health care recipients.

Grant: 1R01AG019726-01A2
Program Director: CHON-LEE, ANGIE J
Principal Investigator: SCOTT, WILLIAM K PHD
Title: Genetic Studies of Successful Aging in the Amish
Institution: DUKE UNIVERSITY DURHAM, NC
Project Period: 2003/07/01-2008/04/30

DESCRIPTION (provided by applicant): Advances in molecular and statistical methods have greatly facilitated the identification of susceptibility genes for diseases, such as Alzheimer disease, that are common in older adults. These same methods may be applied to the study of the natural aging process to identify genes that are associated with a long and healthy life. Identification of both disease-causing and health-promoting polymorphisms and their interactions with the environment has the potential to greatly improve the health of older adults, the most rapidly growing segment of the U.S. population. One method of identifying genes associated with a particular trait is to study relatively stable, isolated populations established by a few founding members, such as the Amish community in northern Indiana. This community has previously participated in a cross-sectional survey for cognitive impairment conducted from 1991-1993. Several families with multiple cognitively impaired individuals were identified and included in ongoing studies of the genetics of dementia at the DUMC Center for Human Genetics. We also observed in these families apparent clustering of "successful aging", suggesting that this trait may be, in part, under genetic control. In light of these observations, we propose a second population survey to systematically evaluate Amish adults aged 80 and older for cognitive and functional impairment. We will determine the prevalence and degree of familial aggregation of successful aging in the Amish community and perform genetic studies to identify genes associated with successful aging. To accomplish these goals, we specifically propose to: (1) conduct a community survey of Amish residents aged 80 and older in Adams and surrounding counties in Indiana and Holmes and surrounding counties in Ohio; (2) examine the relationship between successful aging and genes implicated in longevity; (3) perform a complete genomic screen for successful aging loci, and (4) follow-up results of the genomic screen through positional cloning and candidate gene analysis approaches.

Grant: 3R01AG017056-03S1
Program Director: STAHL, SIDNEY M.
Principal Investigator: SEEMAN, THERESA E PHD
Title: BIOLOGICAL EXPLANATION OF SES DIFFERENCES IN HEALTH
Institution: UNIVERSITY OF CALIFORNIA LOS ANGELES LOS ANGELES, CA
Project Period: 1999/05/26-2004/04/30

DESCRIPTION: (Adapted from the Applicant=s Abstract): The proposed project will investigate the biological mechanisms that are hypothesized to underlie socioeconomic differences in health outcomes among older people. While the fact that poorer and less educated people have higher rates of death, disease, and disability has been widely documented, the question of what biological mechanisms give rise to these socioeconomic differences remain largely unspecified. The proposed analyses will use data on a wide range of biological parameters to examine their role, both individually and cumulatively, in explaining socioeconomic differences in four major health outcomes: death, myocardial infarction, change in physical functioning, and change in cognitive function. The project will use data from the MacArthur Study of Successful Aging, a longitudinal study of 1189 socioeconomically-divers persons aged 70-79 years at baseline, who were interviewed three times during the 1988 to 1996 period. At the time of each interview, sample members provided information about current health conditions and were given a series of performance tests to measure aspects of their physical and cognitive function. Survey information on health outcomes will be augmented with information from Medicare records and the National death Index. Indicators of biological mechanisms are derived from standard medical tests performed at interview and assays of blood and urine samples provided by sample members. The socioeconomic diversity and the range of biological information available in this data set make it ideal for the proposed project. Knowledge of the role of biological risk profiles in producing differential health outcomes by socioeconomic status will provide important information to assist in targeting health care and education resources to reduce health differentials.

Grant: 5R01AG008768-14
Program Director: ELIAS, JEFFREY W.
Principal Investigator: SELTZER, MARSHA M PHD
Title: IMPACTS OF PARENTING ADOLESCENTS & ADULTS WITH AUTISM
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 1990/02/01-2005/08/31

This application seeks five years of support to continue the investigators'dual site research involving the impacts of life long parenting for adolescent and adult sons or daughters with mental retardation (MR). The focus of the work shifts in this application to a new population, as a sample of 400 families of adolescents and adults with autism will be studied. The proposed investigation will address four central issues: (1) the manifestation of symptoms of autism among adolescents and adults (both cross-sectionally and longitudinally), (2) the effects of the behavioral, communicative, and social functioning of persons with autism on parental well-being (again cross-sectionally and longitudinally), (3) the antecedents and consequences of placement of the person with autism, and (4) the impact of differential diagnostic groups on family well-being. The fourth aim, families of persons with autism will be compared with two previously collected samples of families: one with a son or daughter with Down syndrome, and one with a son or daughter with schizophrenia. These samples, and the data relating to them, are available from previous or ongoing funded work by the current investigative group.

Grant: 5R01AG020558-02
Program Director: STAHL, SIDNEY M.
Principal Investigator: SELTZER, MARSHA M PHD SOCIAL SCIENCES,
OTHER
Title: Life Course Impacts of Nonnormative Parenting
Institution: UNIVERSITY OF WISCONSIN MADISON MADISON, WI
Project Period: 2002/05/01-2007/04/30

This research builds on the progress of a small grant and uses the Wisconsin Longitudinal Study (WLS) to investigate the long-range effects of non-normative parenting. Parents who have either a child with a developmental disability (DD) or schizophrenia, or who have experienced the death of a child, will be compared with respect to the parents' attainment and well-being as they transition from midlife to the early retirement years. Using a new set of screening measures, parents in these groups will be identified in the WLS cohort. Affected WLS parents will be compared with unaffected parents, controlling for differences among the parent groups before the non-normative parenting event took place. The analyses will include within- group assessments of heterogeneity among WLS parents who experienced a non-normative parenting challenge, cross-sectional group comparisons at various points in the life course, and longitudinal analyses of the effects of non-normative parenting experiences on life course trajectories and outcomes. The research questions will (1) investigate how the life course in educational, occupational, marital, and childbearing domains diverges when parents have long-term caregiving responsibilities for a child with DD or schizophrenia, or when they experience the death of a child, (2) contrast the resources and well-being of four groups of parents (those who have a child with DD, schizophrenia, experience the death of a child, and a normative comparison group), (3) examine how divergent life course trajectories and unmet aspirations affect the parents' well-being, (4) analyze the extent to which social and psychological resources moderate parental adaptation during midlife and the early retirement years, and (5) investigate the effects of newly-experienced non-normative parenting events between midlife and the early retirement years. This research integrates the life course perspective with models of process and change from the stress and coping framework to understand life-long patterns of adaptation associated with non-normative parenting experiences. The WLS provides an unprecedented opportunity to study the effects of non-normative parenting for a sample that was recruited before the events occurred, and is thus less vulnerable to the self-selection biases that constrained previous research.

Grant: 5R01HL055356-08
Program Director: ELIAS, JEFFREY
Principal Investigator: SIEGLER, ILENE C MPH
Title: Surveillance And Analysis Of The Unc Alumni Heart Study
Institution: DUKE UNIVERSITY DURHAM, NC
Project Period: 1996/05/01-2005/07/31

DESCRIPTION (investigator's abstract): The UNC Alumni Heart Study continues to examine the impact of hostility on health behaviors and psychological status at midlife to test the prospective associations of hostility with coronary heart disease (CHD) events and other health outcomes. The Specific Aims of the proposed research are: [1] To better understand the dynamic interrelationships of psychosocial and behavioral risk factors of the adult life span, we will map the trajectories of hostility, depression, smoking, body mass, exercise patterns, and alcohol consumption using multiple assessments from age 19 to age 60. It is predicted that a significant proportion of the change in risk behavior will be due to trajectories of hostility and depression, operating singly and in combination over time. [2] To test the prospective associations of hostility, depression, and other psychosocial variables (e.g., social support and job strain) with coronary events and mortality observed while the cohort is middle-aged. [3] To broaden the scope of the psychosocial variables to examine individual differences in personality over the life course and dietary practices at midlife in addition to the indicators noted above, and [4] To better understand the effect of gender on the natural history of coronary disease and coronary risk profiles in women, we will monitor changes in menopausal status, and patterns of hormone replacement therapy use among women during midlife and study the associations of these factors with the other risk indicators. In sum, although the literature suggesting that psychosocial factors play a significant role in the etiology of CHD in older samples is convincing, major gaps remain with respect to understanding the associations between psychosocial factors and premature coronary heart disease and mortality during the middle years. Adding additional measures to the present rich data base, places the UNC Alumni Heart Study in an excellent position to help fill these gaps in the next 5 years, as these members of the early Baby Boom Cohort approach age 60.

Grant: 5R01AG018308-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: SILVERMAN, MYRNA A PHD
Title: SELF CARE--COMPARISION OF AFRICAN AMERICANS AND WHITES
Institution: UNIVERSITY OF PITTSBURGH AT PITTSBURGH PITTSBURGH, PA
Project Period: 2000/09/01-2004/08/31

The proposed four-year study is a patient-centered longitudinal study to describe and compare the long term changes in self care behaviors of older African Americans and whites residing in Allegheny County, Pennsylvania who have at least one of two chronic illness prevalent in this population: osteoarthritis and ischemic heart disease. Specifically, we propose to: 1) describe the process by which self care behaviors are adopted, maintained and changed by conducting a longitudinal investigation of stability and change in self care behaviors among older adults with chronic illnesses. We will examine how decisions are affected by a variety of factors including the characteristics of the individual, characteristics of the disease, and characteristics of the environment; 2) describe and analyze the effects of self care behaviors on an individual's assessment and satisfaction with their illness care and the effects of this care on their health related quality of life, disease symptoms, depression and anxiety level and sense of control and efficacy; and 3) document and describe the differences in self care process and effects between African Americans and whites. We will conduct four in-person in-depth interviews with 1200 individuals, 50 percent African American and 50 percent white over a 30-month period at 10-month intervals to obtain information on their health status, current self care strategies, coping styles, identification of additional stressors that would contribute to the modification of these strategies. Secondly, we will conduct telephone interviews five months after the initiation of each longitudinal interview with the entire group to monitor these changes and trigger the need for additional questions to capture the formulation of new self care behaviors or changes in old behaviors or a total of seven interviews. At each interview, we will assess the determinants of self care stability on change (e.g., race, social support, income, gender, age grouping and cultural preferences). The research will be guided by a preliminary model informed by theoretical perspectives directed at the individual's decision making and their socio-cultural context.

Grant: 1R01AG023112-01
Program Director: ELIAS, JEFFREY W.
Principal Investigator: SINGER, ELEANOR PHD
Title: Beliefs about Genes & Environment as Causes of Behavior
Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI
Project Period: 2003/06/01-2005/05/31

DESCRIPTION (provided by applicant): Scientific information about human genetics is accumulating at an accelerating rate, but information about public knowledge, beliefs, and attitudes with respect to these developments is not. And yet such information is crucial for formulating prudent and humane social and ethical policies in these areas. The aim of this proposal is to add to the limited store of knowledge available about public values and attitudes relevant to various aspects of genetic technology. The proposal has two specific aims. The major aim is to investigate experimentally the determinants of people's beliefs about the relative contribution of heredity and environment to differences in such behavioral characteristics as aggression, shyness, and alcoholism. A second aim of the proposal is to investigate trends in knowledge about and attitudes toward genetic testing and genetic technology by replicating questions previously asked in two earlier studies. Given the rapid changes and developments in the field of genetics, and their increasing availability to the public via the mass media, we expect to see changes in attitudes as well. The vehicle for the study will be the 2004 General Social Survey (GSS), a national face-to-face survey of the adult household population of the U.S. The proposed study of beliefs about genetic and environmental influences on behavior will systematically vary (a) the social desirability of the condition or characteristic asked about as well as (b) the race/ethnicity and (c) the gender of the person manifesting the characteristic in order to determine how each of these affects the judgments made. In addition, we will assess the significance for such judgments of the rater's own sociodemographic characteristics (e.g. race, ethnicity, age, education, marital status, and religion), as well as such aspects of the rater's personality as locus of control, optimism-pessimism, and the need for self-esteem. By including four questions about genetic testing among those we add to the survey, we will be able to investigate beliefs about genetic and environmental influences on behavior.

Grant: 5R01AG017473-03
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: SLOAN, FRANK A PHD SOC SC/REL
DI:ECONOMICS, OTHER
Title: VISUAL IMPAIRMENT, TREATMENT, AND EFFECTS ON THE ELDERLY
Institution: DUKE UNIVERSITY DURHAM, NC
Project Period: 2001/04/15-2005/03/31

DESCRIPTION: This four-year study has four major objectives. (1) For elderly persons with diabetes mellitus diabetic retinopathy, glaucoma, and macular degeneration -- diseases that can cause serious impairments to vision and blindness -- we will analyze determinants of utilization of eye care services, and whether or not Medicare beneficiaries with diabetes/diabetic retinopathy and glaucoma receive care in accordance with minimal process of eye care standards. Such standards have been disseminated as guidelines by professional organizations. In this phase, we will address these issues. How do data on patient self-report of diagnosis compare with those obtained from physicians' diagnoses? What proportions of persons with the study diseases receive care at least at the minimum level of guidelines? Holding many factors constant, are there racial differences in treatments for these diseases? (2) We will study the longitudinal course of these diseases, measured in terms of visual and general functional status -- physical, cognitive -- and in terms of placement in a nursing home, and survival. We will analyze effects of care on changes in vision and the other outcome measures. Our data are unique both in terms of the length of time over which patients are followed and in the range of health outcome monitored. (3) We will assess the impact of diabetes, glaucoma, and macular degeneration on total Medicare and Medicaid program cost and on costs privately incurred. Program cost will include cost of vision and non-vision services. In our framework, program cost and patient adherence to guidelines will be jointly determined. (4) We will replicate the analysis of the first 2 objectives for complications of diabetes other than for eyes. We will also specify and estimate a dynamic model of utilization of Medicare-covered services by persons with diabetes -- both vision and nonvision care. The main database will be the National Long-Term Care Survey (NLTCs) for 1982-2001, merged with Medicare claims data for 1982-2001. Eleven papers are planned.

Grant: 5R01AG019312-03
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: SMITH, JAMES P BS
Title: Expected Bequests and Their Distribution
Institution: RAND CORPORATION SANTA MONICA, CA
Project Period: 2001/09/01-2005/07/31

In this project we will learn about bequest behavior using new methods of measuring anticipated and actual bequests. The bequests households anticipate making will be available for up to seven rounds of our panel surveys so that we can track how and why these bequest intentions evolve over time. Actual bequests will be obtained for a large representative sample of decedents who had previously participated in some important household surveys so that their actual bequests can be compared to their previously stated bequest intentions as well as their prior levels of household wealth. Using this data, the project will document patterns of actual bequests left by representative samples of American households and assess the importance of bequests to recipients by describing distributions across all potential recipients-the surviving spouse, children, other relatives, charity, and others. Special emphasis will be given to surviving spouse since bequests may be critical in supplementing the annuity income of which they largely rely. Since they represent an important beneficiary theoretically and empirically, the distribution of inheritances left to children will also receive special attention. Our analysis will evaluate whether bequests are equal across children and when not equal which type of children receive more. We also will explore the evolution of intention to bequeath across the later years of life using panel data with multiple measurements of subjective bequest probabilities. Individuals as well as cohorts may revise their bequest intentions as new information becomes available on their survivor probabilities, on their general health, new grandchildren, the death of a close relative, or through unexpected economic gains or losses associated with the stock market. In this research we will predict what will happen to levels and distribution of bequests that will be left in the future and develop the implications of a new index of future household savings.

Grant: 1R01AG023363-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: SMITH, JAMES P PHD
Title: Education , Self-Management and Adherence
Institution: RAND CORPORATION SANTA MONICA, CA
Project Period: 2003/09/30-2007/08/31

DESCRIPTION (provided by applicant): No matter which health outcome is examined, there exists a quite strong association with education. Moreover, within virtually all chronic diseases of mature adult populations, there remains a very powerful health gradient with years of schooling. In this proposed research, we will extend our earlier National Institute of Aging funded research by investigating the ability of individuals across different education levels to comply with and maintain complex health regimens that are often prescribed to deal effectively with severe health problems. Using both observational and cohort studies, we will isolate the major factors associated with better medical self-management behavior among those with chronic diseases. Particular emphasis will be placed on the role that education plays in promoting better adherence and in isolating those factors that might help explain why and when education affects adherence. We will also assess the importance of patient self-management and adherence to medical regimens in promoting better health outcomes across several salient illnesses, most of which are more prevalent in a older population. These illnesses will include hypertension, high cholesterol, heart disease, diabetes, asthma, and arthritis. The requirements for self-management may vary considerably across different types of illnesses, as may the consequences of non-adherence on subsequent health outcomes. Finally, we will evaluate the relative importance of patient self-management and adherence as a factor accounting for the significant education health gradient across these chronic illnesses.

Grant: 5R01HD033843-05
Program Director: SHRESTHA, LAURA B.
Principal Investigator: SMITH, JAMES P BS
Title: THE NEW IMMIGRANT SURVEY
Institution: RAND CORPORATION SANTA MONICA, CA
Project Period: 2000/09/19-2006/02/28

We propose to carry out, for the first time, a comprehensive, multi-cohort longitudinal survey of new legal immigrants to the United States based on nationally representative samples of the administrative records, compiled by the U.S. Immigration and Naturalization Service, pertaining to immigrants newly admitted to permanent residence. This New Immigration Survey is a follow-up to a pilot project, which received co-funding from NICHD, NIA, NSF, and INS, that has attempted to evaluate the cost and feasibility of fielding the full survey proposed here. The results obtained from the pilot project have informed all elements of the design for the full New Immigrant Survey. In order to monitor changes across cohorts, new samples of immigrants will be drawn periodically. To monitor adaptation over time, each sample will be interviewed at regular intervals over the life cycle. To assess the immigrants' legacy, information will also be obtained about and from their children, both the immigrant children they brought with them and the U.S. citizen children born to them in the United States. We also will put into the public domain a public-use data base from these surveys that will provide an important source of information to assess U.S. immigration laws, the assimilation and experiences of immigrants, and the impact of immigration in the United States. These data will provide prospective and retrospective information of pre-immigration education, work, health, migration, marriage and fertility histories for newly-arrived immigrants. They will also provide useful information on health, on economic status, on schooling, and on children's well-being from a population heterogeneous in English language abilities and native languages.

Grant: 5R01AG018903-03

Program Director: ELIAS, JEFFREY W.

Principal Investigator: SMITH, TIMOTHY W PHD CLINICAL PSYC:CLINICAL
PSYCHOLOGY-UNSPEC

Title: HOSTILITY, MARITAL INTERACTION AND HEALTH IN AGING

Institution: UNIVERSITY OF UTAH SALT LAKE CITY, UT

Project Period: 2001/06/01-2005/05/31

Hostility confers increased risk of coronary heart disease, presumably through the mechanism of cardiovascular reactivity to interpersonal stressors. Marriage is an important context for this mechanism. However, an adult developmental perspective suggests that marital conflict may be a more central issue for trait hostility among middle- aged spouses, whereas the stress of collaboration may be important for hostility in older couples. Guided by a model of individual, spouse, and couple effects of hostility, the proposed study examines the effects of hostility on immediate behavioral and psychophysiological responses to marital conflict and collaboration, and on health outcomes of ambulatory blood pressure, coronary artery disease, marital adjustment, and cognitive functioning. The major aims are to examine (a) how the effect of hostility on behavioral and cardiovascular responses may differ for middle-aged and older adults, during conflict and collaborative problem solving, (b) the effect of hostility on ambulatory blood pressure and coronary artery disease, and (c) the role of hostility in the frequency and quality of collaborative problem solving. One-hundred and fifty middle-aged (40-50 years) and 150 older married couples (60-70 years) will be involved in a 4-day study. Hostility will be measured in a multi-method approach with interview, self-report, and spouse report measures. Marital interaction will be examined as couples discuss a source of marital conflict and solve a planning task. Interaction will be coded for components typical of interactions of hostile persons and also detrimental to collaborative cognition. Psychophysiological reactivity will be examined via blood pressure, heart rate, and impedance cardiography during the two tasks. The effects of hostility will be examined on health outcomes such as coronary artery disease (assessed via computed tomography) ambulatory blood pressure, marital adjustment, and general cognitive function (e.g., fluid and crystallized intelligence). The long-term goal of the research is to identify potentially modifiable determinants of cardiovascular risk, marital adjustment, and cognitive aging in adulthood.

Grant: 5R01AG018016-05

Program Director: SHRESTHA, LAURA B.

Principal Investigator: SOLD0, BETH J PHD SOCIOLOGY:SOCIOLOGY-UNSPECIFIED

Title: MEXICAN HEALTH AND AGING STUDY

Institution: UNIVERSITY OF PENNSYLVANIA PHILADELPHIA, PA

Project Period: 1999/09/30-2004/08/31

DESCRIPTION (Adapted from the Applicant's Abstract): The overall goal of this application is an integrated research agenda, locating research on Mexico's potentially unique old-age health dynamics in a broad socioeconomic context which includes family migration strategies and transfer behaviors. The specific aims of the project are to: examine the aging processes and its disease and disability burden, across multiple health domains, in a large representative sample of older Mexicans; evaluate the effects of individual behaviors, migration history, community characteristics, socioeconomic status and transfers on multiple health outcomes; estimate models of health transitions and assess the effects of socioeconomic status, antecedent behaviors, risk factors, and environmental conditions on the rate and pace of transitions for older Mexicans; compare health dynamics of older Mexicans with comparably aged Mexican-born migrants and second generation migrants using comparable data from the biennial HRS/AHEAD and the NHANES III in order to assess the durability of the purported health advantage of migrants; assess the health of all components of the population from which migrants were selectively recruited, including first-generation Mexican-Americans, migrants who return to Mexico after various length stays in the U. S. and Mexicans with no history of residency in the U. S.; and, consider the ways in which intergenerational transfer systems affect old-age health dynamics in a country where migration is commonplace and remittances may repay prior human and social capital investments or insure against uncertainty in old age. To accomplish these objectives, this application requests support for two waves of data collection (in 2000 and 2002) for the Mexican Health and Aging Survey (MHAS), a nationally representative sample of Mexicans aged 50 and over and their spouse/partners. Approximately 16,830 eligible persons will be identified in conjunction with the 2000 National Employment Survey (Encuesta Nacional de Empleo, ENE). Face-to-face interviews, averaging 80 minutes in length, will collect data on health conditions, functional status, hygienic behaviors, and use of health services (cognitive performance and anthropometric features will be directly measured), attributes of kin and transfer behaviors across the family network; migration history of respondents, children, and siblings; economic measures, and community-level variables. Data files for both waves of data will be publicly distributed. Our analysis methods include multi-state, GoM and other multivariate models of health and transfer outcomes with adjustments for possible migration-selectivity and unobserved heterogeneity.

Grant: 1R01AG023370-01
Program Director: SHRESTHA, LAURA B.
Principal Investigator: SOLD0, BETH J PHD
Title: Comparative Approach to SES Gradient: Aging & Selection
Institution: UNIVERSITY OF PENNSYLVANIA PHILADELPHIA, PA
Project Period: 2003/09/30-2007/08/31

DESCRIPTION (provided by applicant): The general goal of this project is to investigate the mechanisms linking education to health transitions, morbidity processes and mortality outcomes at advanced ages. In particular, we investigate the mechanisms underlying the observed gradual decline in the effect of education at older ages comparing this effect in the very different institutional and socioeconomic contexts of the U.S. and Mexico. We emphasize the role of health-related selection processes, the effects of early life events, parental background, and intergenerational transmissions of human capital on health status in later life, and especially at old age. The specific aims of the project are to: develop comparative indicators of health status for older people based in part on biomarkers; develop a cross-national typology of education that goes beyond simple counts of years of schooling; map how the magnitude of the relationship between education and health outcomes changes with age; consider the role of differential selection on the convergence & morbidity and mortality trajectories; and, assess how differences in education imprint on the aging process, its disease burden and disability in the U.S. and Mexico.

Grant: 1R01AG024046-01
Program Director: SHRESTHA, LAURA B.
Principal Investigator: SOLDO, BETH J PHD
Title: Family Culture and Intergenerational Allocations
Institution: UNIVERSITY OF PENNSYLVANIA PHILADELPHIA, PA
Project Period: 2003/09/30-2008/08/31

DESCRIPTION (provided by applicant): Intergenerational transfers occur within a family context, yet most research on the topic is atomistic, focusing on the attributes and behaviors of individuals in the family matrix and not on the family itself. Social norms and behaviors related to familial obligation and responsibility differ across families, distinguishing the transfer behaviors of one family from another and defining the intergenerational culture within which family members act. This research focuses on shared family traits, in addition to more conventional measures of individual kin, to develop a sociological analysis that: a) examines why similarly-configured families differ in their kin exchange behaviors and why individual characteristics have variable effects across families; b) locates research on transfers to older and younger generations within the same conceptual framework; and, c) examines race and ethnic transfer differences across families. Four central questions guide the proposed research: a) Do families differ in their collective orientation to intrafamily transfers, and what characteristics distinguish among families' transfer behavior? b) How similar to each other are the family transfer cultures of the families of orientation of marriage partners? c) How does family change over time affect transfers and is that relationship conditioned by family transfer culture? d) Are there meaningful cohort differences in family transfers, distinct from differences in family structure? The Health and Retirement Study (HRS) is the major data source. Over the course of the proposed project, seven biennial waves of data (1992-2006) will become available. These data provide dynamic measures of transfer behaviors across as many as four generations of a family and a changing pool of donors and recipients as well as direct and indirect measures of family transfer culture. HRS oversamples of African Americans and Hispanics are adequate for the analyses of ethnic differences. Because the new Mexican Health and Aging Study (MHAS) is modeled on the HRS, comparable data are available to examine intrafamily transfers in a transnational perspective. Multilevel modeling is the primary analytic strategy. Each of the goals listed above requires parallel analyses of parent-to-child and child-to-parent transfers, incorporating a broad range of transfer and family measures, including indicators specific to each spouse/partner.

Grant: 1R01AG022362-01
Program Director: STAHL, SIDNEY M.
Principal Investigator: SOUMERAI, STEPHEN B SCD
Title: Cost-Related Underuse of Medications in the Elderly
Institution: HARVARD PILGRIM HEALTH CARE, INC. WELLESLEY, MA
Project Period: 2003/09/01-2007/06/30

DESCRIPTION (provided by applicant): Since Medicare was enacted in 1965, the program has excluded coverage for outpatient prescription medications except for injection drugs furnished by a physician. It is now widely recognized that the elderly face an erosion of prescription benefits as insurers respond to mounting fiscal pressures with a variety of cost-cutting and cost-shifting measures. Medicare beneficiaries must rely on a range of supplemental sources to help with drug expenses. The Medicare Current Beneficiary Survey (MCBS), administered annually to a representative national sample of elderly and disabled adults enrolled in Medicare, represents the gold standard for information on rates and sources of prescription coverage among elderly Americans. However the MCBS provides little information on cost-related non-compliance with medication regimens, and there are no other national data sources. While preliminary research documents the relationships among out-of-pocket medication costs, rates of non-compliance, and adverse clinical outcomes, no national study to date has addressed whether such cost-related barriers lead to under use of essential drugs for chronic illnesses, substitution of over-the-counter or alternative medicines, or reductions in physician visits. This project will establish a permanent, ongoing national data resource that permits policymakers and researchers to measure, monitor, and identify changes in cost-related under use of medications (CRUM) among elderly Medicare beneficiaries. We will develop new, comprehensive measures of CRUM; validate the measures in a survey of approximately 200 elderly enrollees in a large health plan; integrate the measures in the MCBS for annual surveys of approximately 15,000 non-institutionalized elderly Medicare enrollees (the cost of which will be borne by the US Department of Health and Human Services, Center for Medicare and Medicaid Services); and analyze MCBS data to identify the extent to which CRUM is associated with patient socio-demographics, health status and medical conditions, source of prescription coverage, and out-of-pocket prescription costs.

Grant: 1R01AG019802-01A2
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: STAFFORD, FRANK P PHD
Title: Life Course Wealth, Health, and Mortality in the PSID
Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI
Project Period: 2003/09/01-2007/05/31

DESCRIPTION (provided by applicant): Begun in 1968, the Panel Study of Income Dynamics (PSID) is a longitudinal study of a representative sample of U.S. individuals and their families in which they reside. It emphasizes the dynamic aspects of economic and demographic behavior, but its content is broad, including sociological, psychological, and physical health measures. The PSID is the longest running national panel on family and individual dynamics, and it has consistently achieved unprecedented re-interview response rates of 96-98%. Due to an innovative design choice by the study's initial research planners, the PSID continues to follow and interview adult children of sample families when they leave home. By continually adding these young families, the study maintains a representative sample of the U.S. population, provides measures of social and health conditions over the full life course, and facilitates the study of intergenerational connections of wealth, socioeconomic status, and economic behavior. With the enhancements described in this proposal, the PSID is poised to become the only data ever collected on life course and multigenerational health in a long-term panel representative of the full U.S. population. To achieve these objectives, this application proposes to collect, process, and disseminate data for three main survey modules that would be included in the 2003 and 2005 interviews: (1) health and mortality, (2), wealth and active savings, and (3) pensions. These three modules represent both continuations of question sequences already introduced into the PSID and expansions of them.

Grant: 2R01AG013935-06
Program Director: ELIAS, JEFFREY W.
Principal Investigator: STINE-MORROW, ELIZABETH L PHD
Title: Age Differences in Resource Allocation During Reading
Institution: UNIVERSITY OF ILLINOIS URBANA- CHAMPAIGN, IL
CHAMPAIGN
Project Period: 1996/09/01-2008/02/28

DESCRIPTION (provided by applicant): Throughout the life span, reading is a requisite skill for performing work, attending to personal needs, and participating in society on a number of levels from filing tax returns to helping children navigate through an educational system to maintaining correspondence. In addition, reading enables entry into new worlds allowing continued growth of the self. Not only is the current cohort of older adults disproportionately disadvantaged in literacy skills, but also age-graded changes in processing capacity make some aspects of reading more difficult. This proposal is a request for a continuation of our project examining adult age differences in resource allocation during reading and the impact of these differences on subsequent comprehension and memory performance. We build on our earlier work by integrating our resource allocation approach with the literature on (cognitive and affective) self-regulation, so as to consider the implications of age-graded reductions in processing capacity, increased reliance on knowledge, and increased role of social and emotional goals for reading. A theoretical framework is developed in which self regulation in reading is conceptualized as arising from a set of negative feedback loops functioning in the context of goals and knowledge of the individual reader. An adult developmental model is adopted in which aging is assumed to engender decreases in fluid ability (reducing the efficiency of language computations), increases in crystallized knowledge (thereby increasing reliance on preexisting knowledge), and a shift in goals which give relatively more weight to social-emotional goals relative to cognitive ones. Within this cognitive developmental framework, we propose a series of experiments that explore the conditions under which self-regulation in reading is compromised by resource demands and when it may be used in a compensatory fashion. We specifically explore how self-regulation in reading is affected by (1) challenges created by illegible orthography, complex syntax, and informational density (Series I, II, & III), (2) the availability of background knowledge (Series IV), and (3) social and affective goals (Series V).

Grant: 5R01AG018869-03
Program Director: ELIAS, JEFFREY W.
Principal Investigator: SUITOR, JILL J PHD
Title: PARENT-ADULT CHILD RELATIONS: WITHIN FAMILY DIFFERENCES
Institution: LOUISIANA STATE UNIV A&M COL BATON BATON ROUGE, LA
ROUGE
Project Period: 2001/02/15-2005/01/31

DESCRIPTION (adapted from Investigator's abstract): The proposed study will investigate within-family differences in parent-child relations in later life. Interviews will be conducted with a representative sample of 600 mothers between the ages of 65 and 75 living in the Boston area, their husbands, if available, and all the adult children in the family. African Americans will be over sampled. The study will examine the degree to which adult children in the same family differ in their relationships with elderly parents, as well as the factors explaining these differences. The major research questions are: 1) what is the extent of within-family differences in parent-adult child relations in later-life families? 2) What are the determinants of within-family differences in parent-child relations? Three sets of predictors will be examined as determinants of relationship quality: status similarity of parent and child; developmental history; and exchange and equity characteristics. The study will focus on the effects of within-family differences rather than individual structural and developmental characteristics of each child.

Grant: 1R01AG024045-01
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: SZINOVACZ, MAXIMILIANE E PHD
Title: Intergenerational support structures and pathways
Institution: EASTERN VIRGINIA MEDICAL SCHOOL NORFOLK, VA
Project Period: 2003/09/30-2008/08/31

DESCRIPTION (provided by applicant): With the aging of the population, the number of individuals requiring care is expected to increase dramatically during the next decades. Elder care puts considerable burden and strain on the caregiver. Many family caregivers thus require support by others, often other family members. Indeed, data from a recent national survey indicate that 73% of all family caregivers received assistance from other family members, suggesting that care is best understood as family system effort. Although past research provides a glimpse at the composition of family care systems, the coordination and shifting of responsibilities among family members and of changes in their involvement (e.g., care hours) remain poorly understood. One premise of our project is that the viability of family care systems is contingent on their flexibility, that is, their ability to restructure in response to the ever-changing needs and demands of caregivers and care recipients. A second premise is that caregiving must be understood as a career, of variable duration, with distinct transition points, and that the predictors of caregiver involvement at early stages may therefore differ from those of caregiver involvement at later stages of a relative's illness. Both the flexibility of care systems and changes in caregiver involvement over time are further expected to have consequences for caregivers, care recipients, and use of formal services or nursing home placement. The main aim of this project is to assess changes in family care systems over time, to examine the predictors of such changes both at the level of the caregiver and of the care system as a whole, and to investigate the impact of such changes on selected outcomes, including well-being of the caregivers and care recipients, the extent of unmet care needs, the use of formal services, and nursing home placement. Our analyses will rely on data from the Health and Retirement and Assets and Health Dynamics of the Oldest Old surveys and rely on statistical methods that are appropriate for multi-level data with endogenous and censored variables from complex surveys. Our results can inform policies and programs designed to enhance the care systems of frail and cognitively impaired elders as well as policies and programs targeting the well being of families and caregivers. They also speak to the future availability of family caregivers in response to changing family structures and caregiving requirements.

Grant: 5R01AG014777-04
Program Director: ELIAS, JEFFREY W.
Principal Investigator: TERI, LINDA BA
Title: PROBLEM SOLVING/PHYSICAL INTERVENTIONS AND AGING
Institution: UNIVERSITY OF WASHINGTON SEATTLE, WA
Project Period: 2000/09/30-2005/08/31

DESCRIPTION (adapted from investigator's abstract): The proportion of individuals in the United States who are living into old age had risen dramatically in the past several decades and is expected to continue its upward climb. With this has come a growing interest in identifying ways to help aging adults maintain their health, functional independence, and overall quality of life. The primary goal of this proposal is to evaluate a randomized controlled clinical trial of an intervention designed to improve emotional well-being, increase health behaviors, and enhance problem-solving skills. This intervention will provide skills training in two determinants of successful aging: problem solving and physical exercise. Two hundred forty-eight community-residing adults over age 75 will be randomly assigned to one of four treatment conditions in a two-by-two factorial design: Problem-solving (PS) only, Exercise (EX) only, PS+EX, and Usual Care Control (UCC). Subjects will be recruited from a cohort of older adults who are members of a community-based HMO on whom extensive data are already available. Primary outcome measures include the Geriatric Depression Scale (for assessing depression and emotional well-being), the SF-36 (for assessing health and function), and the Everyday Problem-Solving Test (for assessing problem-solving skills). Secondary outcome measures will assess depression and emotional well-being, physical health, cost of care, and mortality. Outcome measures will be collected at the time of enrollment into the study (baseline), at 3 months (post-treatment), and four times over the course of the 2-year follow-up. It is hypothesized that the PS and EX conditions will be effective in improving emotional well-being and physical health. PS will be effective in improving problem-solving; and the combination of PS+EX will be more effective than the individual interventions in improving all areas. It is also hypothesized that these effects will be maintained over 2 years, and that subjects in PS, EX, and PS+EX will improve on measures of disability and independence, health utilization and cost.

Grant: 5R01AG020909-03

Program Director: PATMIOS, GEORGEANNE

Principal Investigator: THOMAS, DUNCAN PHD
MATHEMATICS:MATHEMATICS-
UNSPEC

Title: Micro Foundations of Health and Development

Institution: UNIVERSITY OF CALIFORNIA LOS ANGELES LOS ANGELES, CA

Project Period: 2001/09/30-2006/08/31

DESCRIPTION: This project will provide new evidence on the inter-relationships between health and economic prosperity at the micro-level, drawing on extremely rich longitudinal data from Indonesia. The data contain multiple indicators of both health status and economic outcomes of individuals over time. Health indicators include nutritional status, physical assessments and self-reports of both general and specific health problems. Indicators of economic status span labor force participation, type of work, hours worked, hourly earnings, wealth and consumption. Causality between health and economic status likely runs in both directions: isolating the causal effect of health on labor market outcomes lies at the heart of this study. Particular attention will be paid to the dynamics underlying the effect of health on labor outcomes; older adults are more likely to experience transitions in health and economic status and so will be emphasized. Indonesia is in the throes of a dramatic economic crisis; the immediate and medium term effects of the crisis on health and labor outcomes will be explored. These analyses will draw on the Indonesia Family Life Survey, (IFLS), a longitudinal survey of individuals, households and communities who have been interviewed up to four times between 1993 and 2000. The combination of the temporal variation associated with the economic shock, the tremendous diversity of Indonesia and the longitudinal dimension of IFLS provides a unique opportunity to identify the effect of health on economic status. Recognizing that analyses based on these statistical models involve assumptions about unobserved heterogeneity, this evidence will be complemented with results from a treatment-control intervention, the Iron Supplementation and Work Evaluation (ISWE), which will be conducted in Central Java. ISWE will be designed and fielded to pin down the causal effect of iron deficiency on an array of labor market behaviors and outcomes. Taking the results from IFLS and ISWE in combination, it will be possible to draw conclusions with considerably more confidence than would otherwise be the case. The research and data collection will be conducted as part of a collaboration of researchers at RAND and two centers at the University of Gadjah Macla (UGM), the Population Studies Center and the Community Health and Nutrition-Research Laboratory.

Grant: 5R01AG008589-10
Program Director: ELIAS, JEFFREY W.
Principal Investigator: TSANG, PAMELA S MA
Title: AGING AND PILOT TIME-SHARING PERFORMANCE
Institution: WRIGHT STATE UNIVERSITY DAYTON, OH
Project Period: 1990/06/01-2004/07/31

Time-sharing or dividing attention among multiple tasks is an important component of many activities such as piloting. But time-sharing is a complex skill that may be particularly prone to the adverse effects of aging and attentional limits. The proposed research focuses on the effects of aging on pilot time-sharing performance. Pilots are considered to have a level of expertise in time-sharing that would not have developed over the course of a typical laboratory study. Pilot performance therefore provides an opportunity to examine the potential of expertise to compensate for the age effects. A four-factor theoretical framework has been proposed to account for time-sharing performance. In addition to age and expertise in time-sharing, the composition of the time-shared tasks and attentional resources are hypothesized to influence time-sharing interactively. Two aspects of time-sharing performance are studied: (a) time-sharing efficiency or the level of dual task performance attained and (b) resource allocation or the degree to which subjects can flexibly deploy limited attentional resources as task priority or urgency dictates. Earlier research has demonstrated age-related time-sharing decrements for attention-demanding tasks and partial expertise compensation for age effects. The proposed research examines the extent to which age effects are modifiable by experience in a more flight domain-specific time-sharing condition. Further, mechanisms of the age-related declines and expertise compensation are explored. The research has important theoretical and practical implications. A validated theoretical framework can help elucidate the properties of attentional resources and to help predict time-sharing performance. The proposed research also contributes to a scientifically derived database of pilot performance that should have important implications pertinent to the Age 60 rule that prohibits commercial airline pilots age 60 or above to be the pilot-in-command. Other practical implications include the design of age-independent diagnostic tests for time-sharing decrements, and the specification of training or skill maintenance requirements.

Grant: 5R01AG020549-02
Program Director: SHRESTHA, LAURA B.
Principal Investigator: VAUPEL, JAMES W MOTH OTHER AREAS
Title: Demographic Analysis of Sardinian Longevity
Institution: DUKE UNIVERSITY DURHAM, NC
Project Period: 2002/09/01-2005/08/31

DESCRIPTION (provided by applicant): Research is proposed to document and verify a remarkable pattern of low mortality among Sardinian males after age 80 and to explore possible determinants. The proposed research builds on and extends the outstanding AKEA study of Sardinian centenarians. This study reported an unexpectedly low female/male ratio among centenarians (about 2/1) and the presence of extremely old males (105+ and 110+) on Sardinia. Demographers were skeptical. To determine the truth, the demographer Michel Poulain was sent to Sardinia to validate the AKEA data. His careful study suggests that the Sardinian data are reliable. That is, as a result of the AKEA research and the subsequent validation by Poulain, the remarkable survival of Sardinian males now appears to be a fact rather than an artifact of bad data. Hence, an international team of demographers and biologists has prepared this application. The proposed research has five specific aims. First, we plan to use detailed vital statistics data for Sardinia and the rest of Italy to determine if there is a special pattern of mortality on Sardinia. Second, as a follow-up of the AKEA study, we plan a major geriatric survey to identify, interview, physically examine, and take blood samples from 800 elderly individuals. Third, we propose meticulous examination of detailed original records to validate alleged long-livers and to compile information about early-life events. Fourth, we intend to analyze DNA from these subjects to determine the frequency of various polymorphisms and haplogroups. Fifth, we aim to apply some specific, advanced methods of demographic and statistical analysis to determine genetic, early-life, and current factors affecting longevity. The data collected will be shared with project and other researchers to undertake many other analyses.

Grant: 5R01AG016201-05
Program Director: ELIAS, JEFFREY W.
Principal Investigator: VERHAEGHEN, PAUL PHD
Title: SEQUENTIAL/COORDINATIVE COMPLEXITY IN COGNITIVE AGING
Institution: SYRACUSE UNIVERSITY SYRACUSE, NY
Project Period: 1998/12/01-2003/11/30

DESCRIPTION (adapted from investigator's abstract): Aging is characterized by declines in a large number of aspects of the cognitive system (e.g. Salthouse, 1991; Kausler, 1994). An important question is whether the number of mechanisms behind these declines is smaller than the number of processes involved. The present application operates within the levels-of-dissociation framework, formulated by Kliegl and associates (e.g. Kliegl, 1996; Verhaeghen, Kliegl, & Mayr, 1997), which states that age-related differences in speed and accuracy are characterized by certain well-defined, discrete transitions between different levels of processing complexity. More specifically, the investigator intends to investigate the distinction between sequential processing (i.e., processing that is carried out in a number of independent processing steps) and coordinative processing (i.e. processing while a need exists for organizing the transfer of information between processing steps, thus forcing the system to store intermediate results in working memory while concurrent processing is going on). Currently, a number of crucial assumptions and implications of the framework have gone uninvestigated. The present application is aimed at remediating this situation. (1) Higher-order regularities in the sequential-coordinative distinction will be investigated. Are the effects truly modular, as Kliegl (1995) has proposed; or should they rather be conceptualized as state transitions? (2) The proposed all-or-none character of the jump from sequential to coordinative processing in late adulthood will be examined. Do substantial increases in working memory load indeed not lead to further dissociations? (3) The coordination assumption will be tested. Is coordination - stacking information into working memory and retrieving it while concurrent processing is going on - truly the crucial factor, or is a passive working memory load hypothesis sufficient explanation? (4) It will be tested whether the mode of processing changes from sequential to coordinative processing, and whether an age differential exists in such mode shifts. (5) Finally, it will be tested whether an artifact/disuse interpretation of the distinction is feasible, or whether the dissociation persists after a period of extended practice.

Grant: 1R01AG021152-01A1
Program Director: STAHL, SIDNEY M.
Principal Investigator: WAGENAAR, ROBERT C PHD
Title: Rehabilitation for Self-Management of Parkinsons Disease
Institution: BOSTON UNIVERSITY CHARLES RIVER BOSTON, MA
CAMPUS
Project Period: 2003/06/01-2006/05/31

DESCRIPTION (provided by applicant): The overall goal of the proposed research is to determine whether rehabilitation that focuses on self-management of health helps to improve the day-to-day functioning and quality of life of community-living clients with Parkinson's disease (PD), beyond the effects of medical treatment alone. Typically for people with PD, medical treatment declines in effectiveness over a variable number of years, and these individuals face a relentless progression into disability and lowered quality of life that can end in a need for custodial care. If a rehabilitation program can ameliorate disability and support a high quality of life by positively influencing mobility, communication, and healthful daily living skills, it is possible that more intensive use of medication could be postponed. As a result, people with this disease might benefit longer from medication and be less quickly referred to costly inpatient rehabilitation and long term care facilities. The proposed research uses rigorous methodology, which is rare for studies of rehabilitation with this population, and builds on our previous research toward understanding the role of rehabilitation in promoting health in people with PD. In a randomized controlled design, people with PD will be assigned to one of three conditions for a duration of 6 weeks: (i) medication only, (ii) medication plus 2 outpatient group rehabilitation sessions and 1 social activity session per week, or (iii) medication plus 2 outpatient group rehabilitation sessions and 1 home/community rehabilitation session per week. Rehabilitation will occur through integrated physical, occupational, and speech therapy services specialized to the self-management of health needs of people with PD. The first specific aim of the proposed study is to determine if increasing "doses" of self-management rehabilitation (from Conditions i to ii to iii) result in increasingly positive quality of life outcomes. The second aim is to document change in rehabilitation effects at 2 and 6 months post-intervention. The third aim is to describe possible active ingredients in the rehabilitation by measuring neuromuscular and voice function outcomes. The fourth aim is to provide evidence for the validity of self-management outcome measures for use with PD. It is hypothesized that there will be beneficial and lasting effects of rehabilitation for quality of life outcomes.

Grant: 1R01AG021487-01A1
Program Director: PATMIOS, GEORGEANNE
Principal Investigator: WAITE, LINDA J PHD
Title: National Social Life, Health and Aging Project
Institution: NATIONAL OPINION RESEARCH CENTER CHICAGO, IL
Project Period: 2003/09/30-2008/08/31

DESCRIPTION (provided by applicant): This study will explore health and well-being in American men and women age 57-84. We propose a nationally representative in-home survey of 3,000 non-institutionalized people to describe, for the first time, distributions of physical and psychocognitive health, illness, medication use, intimacy and sexuality among older adults and to evaluate the relationships among these components of health in different sociocultural contexts. Specifically, we aim to: 1) Describe health of older community-residing Americans: A) Describe distributions of physical and psychocognitive health, social networks and capital, illness, medication use and sexuality among older adults. B) Evaluate the relationships among these components of health in different sociocultural contexts. C) Evaluate the relationship between quality of life and health behaviors among older adults, including: sexuality, physical activity; nutrition; sleep; alcohol, tobacco and other substance use. 2. Evaluate the relationship between health and older adult sexuality, focusing on: A) Physical illness and disability: arthritis, Alzheimer's disease, cancer, cardiovascular disease, diabetes, obesity, urinary incontinence and sexually transmitted diseases including HIV/AIDS; B) Mental illness: depression, dementia, stress, anxiety, low self-esteem, poor body-image; C) Medication use: prescription, self-medication, and alternative remedies. 3) Examine sexuality within social networks and the encompassing sociocultural context: A) Evaluate the relationship of older adult sexuality to important life stages (retirement, divorce, widowhood, and formation of new partnerships including remarriage). B) Evaluate the relationship between sexuality and social embeddedness including: sociability, independence, loneliness, physical, emotional, and sexual abuse. C) Ascertain older adults' perceptions about the relationship of sexuality to health and their needs for physician-patient communication and health care services in this domain.

Grant: 1R01AG022314-01
Program Director: STAHL, SIDNEY M.
Principal Investigator: WALLACE, KIMBERLY A PHD
Title: Resilience in Native American Older Adults
Institution: UNIVERSITY OF MONTANA MISSOULA, MT
Project Period: 2003/09/30-2006/08/31

DESCRIPTION (provided by applicant): The aims of the proposed study are to: (1) advance understanding of resilience in later adulthood in a sample of Native Americans, and (2) identify and examine personal and support factors that contribute to positive health outcomes in this sample. In addition, an important aim of this research is to: (3) examine resilience profiles as they relate to health outcomes among Native American older adults. Resilience refers to one's ability to bounce back after adversity and is thought to be a function of one's available protective factors. Although a substantial literature on resilience has emerged with children and adolescence, this process is not well understood in later life. Because of the multitude of challenges that often accompany aging, older adulthood is a particularly important age-span in which to examine resilience. At the same time, although minority research in the field of aging is increasing, there is still a dearth of information in this area as well. Designed to begin to address these gaps in the literature, the proposed study combines qualitative and quantitative methodologies to examine stress, personal (spirituality; sense of self) and support (family and community support) resources, and health outcomes (mental and physical) in a sample of Native Americans over the age of 50 living on a reservation. Specifically, Study 1 is an examination of the factors that contribute to positive adaptation in a sample of Native American older adults. Data will be collected using semi-structured interviews and analyzed using a process of thematic categorization. Study 2 is an investigation of the factors identified in Study 1 as they relate to positive health outcomes. Study 2 will be conducted using in-person surveys; cluster analysis will be used to classify groups of individuals according to similarities on levels of stress and the protective factors, and ANOVA will be used to validate the cluster solution and investigate any differences in health outcomes by cluster membership. Findings from this research will help further theoretical understanding of resilience in later life by elucidating the complexities of resilience not normally observed in the general population. This research will also serve as a foundation for future inquiries in this area, particularly with regards to the complex, multidimensional nature of resilience, its psychological, social, and physical components, and trajectories of change in resilience mechanisms over time.

Grant: 5R01AG016661-05
Program Director: SHRESTHA, LAURA B.
Principal Investigator: WEINSTEIN, MAXINE A BS
Title: BIODEMOGRAPHY OF HEALTH, SOCIAL FACTORS & LIFE CHALLENGE
Institution: GEORGETOWN UNIVERSITY WASHINGTON, DC
Project Period: 1999/09/01-2004/08/31

Demographic processes, the social environment, and life challenge are intimately interlocked with functional status and illness. The social environment, encompassing position in social hierarchy as well as linkages within social networks and support systems, affects exposure to challenge and mediates its effects. This biodemographic investigation has two primary goals. First, we propose to elaborate the relationship between life challenge and health, exploring how the social environment affects that relationship. Specifically we will: 1) Identify challenges that are most strongly associated with, and discriminate best between, the preservation and deterioration of health; 2) Examine both the costs and benefits to health of social connection, support networks, instrumental assistance and emotional support, and social activity. We will identify the components that are most important for the maintenance of mental and physical functioning and for mediating the effects of challenge on health outcomes; and 3) Explore the effects of cumulative advantage and cumulative adversity on health taking into account both timing and severity of life events. Second, we propose to explore how our understanding of the relationships among life challenge, the social environment, and health can be enhanced by incorporating biological markers of health and stress. We will: 1) Investigate the extent to which biological markers of stress and chronic illness are related to reports of life events; 2) Examine the associations between the biological markers and data from physicians' examinations and self-reported health status, and explore their links to survival based on data from death certificates and the household registry; and 3) Explore the extent to which the biological markers can explicate the relations among the social environment, challenge, and health. We will use unusually rich, population-based data from a longitudinal study of the elderly. These data have been collected periodically since 1989 and comprise detailed retrospective and current status information on health and on social, economic, and demographic characteristics. We propose to collect biological markers of health and of life challenge from a subset of 1000 of the participants based on physical exams, and assays of blood and urine specimens. Our analytical strategy uses two multivariate procedures: 1) generalized linear models (especially those for limited dependent variables); and 2) grade of membership models. Our use of both techniques will exploit their complementary strengths for answering our research questions.

Grant: 5R01AG019605-04
Program Director: STAHL, SIDNEY M.
Principal Investigator: WILLIAMS, REDFORD B MD INTERNAL MED:INTERNAL
MEDICINE-UNSPEC
Title: STRESS, SEROTONIN GENE & HEALTH DISPARITIES
Institution: DUKE UNIVERSITY DURHAM, NC
Project Period: 2000/09/30-2005/08/31

The long-term objective of this research proposal is to elucidate underlying biological and behavioral mechanisms whereby stressful social and physical environments contribute to health disparities between socioeconomic and racial groups. To achieve this objective, the following Specific Aims are proposed: Aim 1 - To determine whether persons who are caregivers for a spouse with Alzheimer's Disease or other chronic dementia have a more adverse profile of behavioral and biological characteristics than matched controls without caregiving responsibilities. Aim 2 - To determine whether living in a stressful physical environment (based on neighborhood characteristics) leads to a more adverse profile of biobehavioral characteristics among caregivers than noncaregivers. Aim 3 - To determine whether the impact of stressful social and/or physical environments on health-damaging biobehavioral characteristics is moderated by the presence of a hostile personality type or genetic polymorphisms that affect CNS serotonin function. In secondary analyses, we shall also evaluate the moderating effect of other potential moderators - e.g., underlying CHD or other medical disorder, race, gender, social support, and socioeconomic status. We shall recruit a sample of 200 caregivers and 200 matched controls without caregiving responsibilities. We shall assess the impact of caregiver status on behavioral (negative affects and health practices) and biological (cardiovascular and neuroendocrine function at rest and during stress, metabolic syndrome) characteristics likely to underlie health disparities. We shall determine the impact of the physical neighborhood environment, both alone and interacting with caregiver status, upon the biobehavioral mechanisms. We shall also evaluate the moderating effects of serotonin-related genetic polymorphisms, hostile personality type and other medical/physical and social characteristics of the subjects upon the impact of caregiving and physical environments on biobehavioral mechanisms. In addition to increasing understanding of biobehavioral mechanisms responsible for health disparities, the findings could point to targets for specific interventions aimed at ameliorating these disparities.

Grant: 5R01AG015321-07
Program Director: STAHL, SIDNEY M.
Principal Investigator: WILLIAMSON, GAIL M MS
Title: Quality of Informal Care and Caregiving Transitions
Institution: UNIVERSITY OF GEORGIA ATHENS, GA
Project Period: 1997/09/30-2007/07/31

DESCRIPTION (provided by investigator): This is a competing renewal application to continue support for the Family Relationships in Late Life project (FRILL; R01 AG15321). Long-term objectives are to: (1) specify a predictive profile of the quality of care (QC) informal caregivers are likely to provide to community-residing frail and disabled elders, (2) develop a brief portable instrument useful to practitioners that characterizes QC and demonstrate that it can be used widely, and (3) demonstrate the potential utility of this profile and instrument in early identification and appropriate treatment to improve not only quality of informal care but also caregiver well-being (both while providing care and after caregiving duties end). The proposed follow-up study (FRILL2) builds on existing infrastructure and accomplishments and extends FRILL in several new directions. FRILL2 will enroll 500 coresiding caregiver-care recipient dyads for 3 longitudinal assessments at 18-month intervals, and an entirely new component will follow caregivers who transition out of caregiving (e.g., through care recipient death or institutionalization) at 6-month intervals. QC assessment will be expanded to include not only indicators of maltreatment but also care that ranges through sufficient to exemplary. Using refined models, methods, and measures, FRILL2 will: (1) determine the extent to which predisposing factors (e.g., amount of care provided) and caregiver mental health (CGMH; depression, anger, anxiety, and cognitive impairment) predict current and future indicators of the full range of QC, caregiving transitions, and long-term caregiver well-being, (2) over-sample African American dyads at intake to produce a sample adequate for longitudinal comparisons between Whites and African Americans in the pre- and post-transition caregiving experience, and (3) test hypothesized cross-sectional and longitudinal associations between predisposing factors, CGMH, QC, caregiving transitions, and post-transition caregiver well-being. Tests of hypotheses and model fit will employ structural equations modeling, latent growth modeling, and latent transition analytic techniques.

Grant: 5R01AG020638-02
Program Director: SHRESTHA, LAURA B.
Principal Investigator: WILLIS, ROBERT J PHD
Title: Internet Interviewing and the HRS
Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI
Project Period: 2002/04/15-2007/03/31

We request funding for a five year project to conduct two Internet interviews with a subset of the respondents to the Health and Retirement Study (HRS), and to set up a separate Internet panel of 1,000 non-HRS respondents, who will be interviewed via Internet twice a year for four years, plus a control group of 500 non-HRS respondents, who will be interviewed once a year by telephone for four years. The data collection and analysis will inform the HRS about the potential of Internet interviewing and may serve as a tested sample for the HRS. Our proposed study covers both methodological issues and substantive issues, foremost in economics, cognitive psychology and epidemiology. In view of the current distribution of Internet access among the population (with access dropping off among older age groups), it is anticipated that in the foreseeable future the HRS will use Internet interviewing alongside other modes. This motivates the mixed mode design of the proposed study. Specifically, we aim: 1. To provide data that will permit a comparative study of the population of Internet interviewees with the population of telephone interviewees with the goal of understanding selection bias; 2. To provide more systematic insight in the properties of Internet interviewing in comparison with other modes of collecting survey data, in particular among middle aged and elderly respondents; 3. To initiate various experiments in questionnaire and question design, exploiting the potential of Internet interviewing. Special attention will be paid to the role of cognitive functioning and the suitability of the Internet as an interviewing environment. 4. To improve the measurement of various important objective variables such as consumption or wealth; 5. To develop new measurement methods for complex possibly subjective variables such as probabilities, expectations, health histories, risk attitudes and time preferences; 6. To make the data generated by these activities available to the research community. To gear the outcomes of the research towards partial and gradual implementation of Internet interviewing in the HRS as of 2004.

Grant: 3R01AG015918-04S1
Program Director: STAHL, SIDNEY M.
Principal Investigator: YOUNG, YUCHI DRPH
Title: REHABILITATION AND FUNCTION RECOVERY AFTER HIP FRACTURE
Institution: JOHNS HOPKINS UNIVERSITY BALTIMORE, MD
Project Period: 1999/05/15-2004/04/30

DESCRIPTION: (adapted from Investigator's abstract) The broad, long-term objectives of this proposal are to understand the effects of post-acute rehabilitation and to improve functional independence among older hip fracture patients. The specific aims are: (1) To conduct an epidemiologic study of the pattern of use of post-acute rehabilitation facilities and the factors associated with choice of rehabilitation locations where patients receive their prescribed post-acute rehabilitation; (2) To examine the factors associated with the short-term and long-term effect of post-acute rehabilitation on functional recovery. The dose response effect of the amount of post acute rehabilitation on functional score will be tested adjusting for patient characteristics and other potential cofounders; (3) To examine the factors associated with Medicare payment incurred due to hip fracture in both the acute and post- acute care setting and to calculate the cost-effectiveness ratio. Hip fracture, a major problem of persons ages 65 and over, causes significant mortality, morbidity, and functional impairment. The loss of functional independence imposes a heavy burden on individuals, caregivers, and requires costly long-term care. Rehabilitation, as a tertiary prevention, is intended to restore prefracture autonomy and functional independence. Previous studies have examined functional recovery among elderly hip fracture patients who received interventions mostly in inpatient rehabilitation settings. Few studies have examined the effectiveness of post acute rehabilitation on functional outcome in multiple settings (inpatient, outpatient or subacute rehabilitation settings) and take into account the intensity and quantity of rehabilitation services received. The proposed study will use a longitudinal cohort design prospectively to collect and analyze demographic, medical, and psychosocial impacts of post acute rehabilitation on functional outcome and cost. Subjects will be a sample of 300 community- dwelling elders with unilateral hip fracture, who have had a surgical repair (internal fixation, hemiarthroplasty, or total hip replacement), and received prescribed post acute rehabilitations in any one of the predetermined inpatient, outpatient, or subacute rehabilitation facilities. The longitudinal data on demographic, medical, psychosocial characteristics and functional status will be collected through repeated interview surveys and Medicare claims data. The intent is that the results of this study will provide epidemiologic data on choice and utilization of post acute rehabilitation settings, and information on the effectiveness of post acute rehabilitation on functional recovery and cost incurred. Findings will be useful for developing intervention programs to improve functional independence among elderly hip fracture patients.

Grant: 5R01AG015918-05
Program Director: STAHL, SIDNEY M.
Principal Investigator: YOUNG, YUCHI DRPH
Title: REHABILITATION AND FUNCTION RECOVERY AFTER HIP FRACTURE
Institution: JOHNS HOPKINS UNIVERSITY BALTIMORE, MD
Project Period: 1999/05/15-2004/04/30

DESCRIPTION: (adapted from Investigator's abstract) The broad, long-term objectives of this proposal are to understand the effects of post-acute rehabilitation and to improve functional independence among older hip fracture patients. The specific aims are: (1) To conduct an epidemiologic study of the pattern of use of post-acute rehabilitation facilities and the factors associated with choice of rehabilitation locations where patients receive their prescribed post-acute rehabilitation; (2) To examine the factors associated with the short-term and long-term effect of post-acute rehabilitation on functional recovery. The dose response effect of the amount of post acute rehabilitation on functional score will be tested adjusting for patient characteristics and other potential cofounders; (3) To examine the factors associated with Medicare payment incurred due to hip fracture in both the acute and post- acute care setting and to calculate the cost-effectiveness ratio. Hip fracture, a major problem of persons ages 65 and over, causes significant mortality, morbidity, and functional impairment. The loss of functional independence imposes a heavy burden on individuals, caregivers, and requires costly long-term care. Rehabilitation, as a tertiary prevention, is intended to restore prefracture autonomy and functional independence. Previous studies have examined functional recovery among elderly hip fracture patients who received interventions mostly in inpatient rehabilitation settings. Few studies have examined the effectiveness of post acute rehabilitation on functional outcome in multiple settings (inpatient, outpatient or subacute rehabilitation settings) and take into account the intensity and quantity of rehabilitation services received. The proposed study will use a longitudinal cohort design prospectively to collect and analyze demographic, medical, and psychosocial impacts of post acute rehabilitation on functional outcome and cost. Subjects will be a sample of 300 community- dwelling elders with unilateral hip fracture, who have had a surgical repair (internal fixation, hemiarthroplasty, or total hip replacement), and received prescribed post acute rehabilitations in any one of the predetermined inpatient, outpatient, or subacute rehabilitation facilities. The longitudinal data on demographic, medical, psychosocial characteristics and functional status will be collected through repeated interview surveys and Medicare claims data. The intent is that the results of this study will provide epidemiologic data on choice and utilization of post acute rehabilitation settings, and information on the effectiveness of post acute rehabilitation on functional recovery and cost incurred. Findings will be useful for developing intervention programs to improve functional independence among elderly hip fracture patients.

Grant: 5R01AG010569-10
Program Director: ELIAS, JEFFREY W.
Principal Investigator: ZELINSKI, ELIZABETH M. PHD
Title: LONGITUDINAL ASSESSMENT OF COGNITION IN ADULTS
Institution: UNIVERSITY OF SOUTHERN CALIFORNIA LOS ANGELES, CA
Project Period: 1993/09/30-2004/08/31

The objectives of the proposed research are to determine whether findings of cross-sectional age differences correspond to longitudinal changes in memory in older adults and to evaluate hypotheses regarding memory deficits in older adults. There is a large literature on age differences in memory demonstrating that older adults have deficits in episodic memory, and considerable effort is devoted to identifying the mechanisms of those deficits. Yet few studies have documented how memory changes in individuals as they age. The significance of the present research program is that it charts longitudinal change in memory, it assesses individual differences in memory change and the sources of those differences, it uses multiple changes of all cognitive constructs and structural equation models to analyze the data, and it includes experiments to test new models of cognitive change, which may then be incorporated into the study for future evaluation of longitudinal slopes. The study uses multi-sample sequential designs that collect data from adults in ranging in age from 30-97 and follows them longitudinally at 3-year intervals. Longitudinal changes are compared with changes estimates from cross-sectional samples collected as part of the project to evaluate the effects of age changes and cohort differences. This makes it possible to evaluate the external validity of cross sectional designs, which re the rule in memory. The role of individual differences in longitudinal memory performance is investigated through analyses of changes in memory predictors including psychometric abilities related to fluid and crystallized intelligence, working memory perceptual speed, and retrieval, as well as demographic characteristics including gender, education, health, and affective status. These data will test the hypothesis that predictors of memory change vary with the requirements of the memory tasks using latent change modeling. For example, it is expected that cognitive slowing and retrieval will best predict problems in retrieving unrelated words from a list, whereas working memory deficits will best predict problems in discourse memory. The results of this research will not only provide answers to important methodological questions regarding the parameters of age changes in memory, but also address a number of issues related to individual differences in intra-individual change with age in cognition, and suggest possible mechanisms of age change in memory in healthy older adults.

Grant: 5R01AG020063-03
Program Director: SHRESTHA, LAURA B.
Principal Investigator: ZIMMER, ZACHARY S MA
Title: Comparative Study of Health Transitions in Later Life
Institution: POPULATION COUNCIL NEW YORK, NY
Project Period: 2001/09/30-2004/08/31

DESCRIPTION (provided by applicant): This proposal is one of two parallel submissions from separate institutions constituting a single project. The Principal Investigators are: Zachary Zimmer, Population Council, and Mary Beth Ofstedal, University of Michigan. The overall goal of the project is to describe and analyze health transitions and health care utilization patterns in four Asian countries undergoing rapid population aging and social and economic change. The study involves comparative analyses of recent panel surveys of older populations in Taiwan (1989-1999), Indonesia (1993, 1997, 1998), the Philippines (1996, 2000-2001), and Singapore (1995, 1999). The Asian panel surveys represent the first nationally-representative, longitudinal data available on the older population for these countries, which span a continuum of socioeconomic development. The comparative approach allows for estimates of how the potential demand for care and support varies between countries (i.e., prevalence and transitions in health outcomes) and how generalizable the links are between socioeconomic status, social support and health that have been observed in many developed nations in the West. The project has three specific aims: (1) to estimate population prevalence levels of health outcomes (functional limitation, chronic conditions, and self-assessed health status), examine recent trends in prevalence levels within countries, determine individual-level transition rates in health status, and estimate active life expectancy; (2) to investigate the effects of socioeconomic status and family network characteristics and social support on health status transitions among older adults; and (3) to assess the roles of access and need as determinants of health care utilization by examining individual-level and community resource characteristics. A variety of analytic techniques will be employed depending on the form of the dependent variable and the goal of the particular analysis. Logistic regression models will be utilized in analyses of prevalence of health outcomes and changes in prevalence levels, and a combination of logistic and linear regression techniques will be used in analyses of health care utilization. Multinomial logit models will be used for analyses of health transitions; active life expectancy will be examined using multistate life tables for different population subgroups, and structural equation models will be used to test for cross-lagged effects of socioeconomic status and health.

Grant: 5R01AG018967-03
Program Director: STAHL, SIDNEY M.
Principal Investigator: ZIMMERMAN, SHERYL I PHD
Title: END OF LIFE CARE IN RESIDENTIAL CARE AND NURSING HOMES
Institution: UNIVERSITY OF NORTH CAROLINA CHAPEL CHAPEL HILL, NC
HILL
Project Period: 2001/06/01-2004/05/31

Nearly three million elderly are housed in long-term care (LTC) settings, and the numbers and proportions of persons who live and die there are increasing. Until recently, most LTC was provided in nursing homes (NHs), but non-nursing home residential care/assisted living (RC/AL) has been proliferating as an alternative to NH care. RC/AL facilities are extremely varied, ranging from small board and care homes to large complexes; in many cases, their residents resemble persons in NHs, including elderly with Alzheimer's Disease and related dementia. Despite their prevalence, and the fact that they are becoming significant providers of end-of-life care, virtually no information exists regarding how LTC facilities attend to the end-of-life of their residents; for RC/AL facilities, such information is completely lacking. This study will collect data from an established, stratified, random sample of LTC facilities and residents across four states to describe how care is provided in these diverse RC/AL facilities (stratified to include small facilities; larger, traditional facilities; and larger, new-model facilities) and NHs, and will compare the structure and process of that care, select outcomes of care, and the relationship between care and outcomes for a diverse group of residents. Specifically, data will be collected from 193 RC/AL facilities and 40 NHs participating in NIA's Collaborative Studies of Long-Term Care, to describe, compare, and evaluate the structure (the facility's capacity to provide care; the care setting) and process (the manner in which care is delivered; the application of care) of end-of-life care. Data also will be collected for a stratified sample of 450 of the residents who die or are transferred up to three days before their death, to describe: (1) the characteristics of the residents who die, such as their age, cognitive and comorbid status, and cause and site of death; (2) the care provided to these residents at the end-of-life, such as primary careprovider continuity and training to manage pain (structure), and advance care planning, administration of pain medications, and emotional support (process); and (3) select outcomes of end-of-life care, such as resident discomfort and quality of life, and family and staff satisfaction with care. Analyses also will determine the relationship between the structure and process and select outcomes of end-of-life care [e.g., the relationship between careprovider training (structure), administration of pain medications (process), and resident discomfort (outcome)]. This project will constitute a significant advance in the data available to maximize the end-of-life experience of millions of elderly who die in LTC settings.